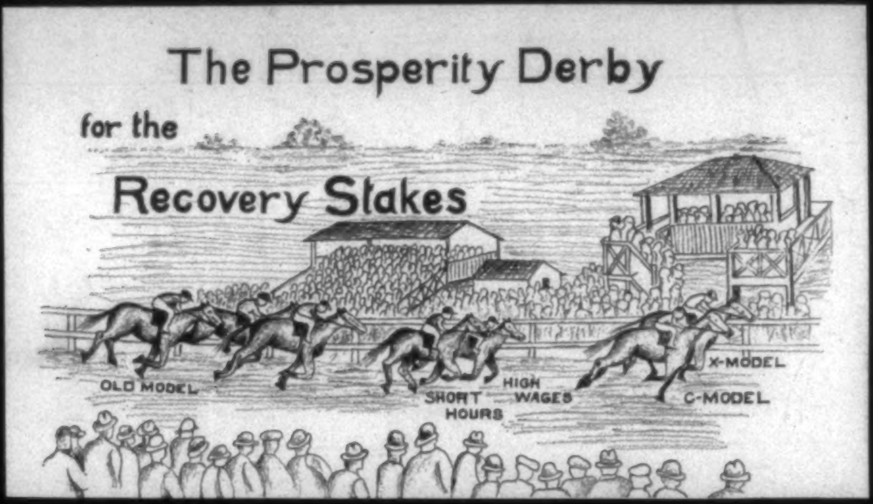
INSTITUTE FOR RESEARCH OCT 34
IN SOCIAL SERVICE 1134 G R
UNIVERSITY OF N C BOX 711

INSTITUTE FOR RESEARCH IN SOCIAL SCIENCE

TEXTILE BULLETIN

VOL. 45 JANUARY 25, 1934 No. 21



Are You Playing the 100 to 1 Shot?

The favorite colts for the Prosperity Sweepstakes are "X Model" and "C Model" from the stables of Modern Machinery

Their records show that when properly driven they can beat the strong-limbed ponies "High Wages" and "Short Hours"—but the ponies will fight it out to a good finish

The owners of "Old Time Model" think they can see one more race in their nag's shaky legs

The Wise Bookmakers—sizing up the favorites and recognizing the ability of "High Wages" and "Short Hours" to make it a hot race—have made "Old Time Model" a 100 to 1 shot

Which Horse Carries Your Money?

Under present track conditions at Recovery Park it is dangerous to stake the Income of Your Mill on the Wrong Horse

DRAPER CORPORATION
Hopedale Massachusetts
Southern Offices Atlanta Ga and Spartanburg S C

NRA MEMBER U.S. WE DO OUR PART

A drawing made at one of our plants by D. Douglass

Tapioca Flour (Krebet Brand)

SUPERFINE ... VICTORY ... ACME

A grade for every job. And we also import—

SAGO FLOUR

535 FIFTH AVENUE **AMERICAN CYANAMID & CHEMICAL CORPORATION** NEW YORK, N. Y.

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 118 WEST FOURTH STREET, CHARLOTTE, N. C. SUBSCRIPTION $2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MARCH 3, 1897.

INSTITUTE F
RESEARCH I
SOCIAL SCIENCE

TEXTILE BULLETIN

Vol. 45—No. 21 January 25, 1934

Research on Fastness to Light of Dyestuffs

In his report to the American Association of Textile Chemists and Colorists, W. H. Cady, chairman of the sub-committee on Light Fastness, said the work had been concerned with:

One—developing standards of fastness:

Two—testing the relative merits of different light fading lamps to determine which is most like the sun; and

Third (and the most recent work—testing the relative effect of different intensities of light in fading dyes when humidity and temperature are constant.

1. *Developing Standards of Fastness.* Fifteen or twenty years ago the Echtheitskommission of Germany published selected lists of dyes, eight for cotton, eight for wool, etc., possessing different degrees of fastness to light, ranging from very fugitive to very fast, and recommended that these be adopted as standards of fastness for all the dyes in their respective classes. Subsequently, it was found advisable to withdraw all the dyes except those on wool, which were recommended to be used as standards for all colors, regardless of fiber. The original list of wool dyes was thoroughly tested out by our committee several years ago by means of sun and Fade-Ometer tests, using dyed samples made under German auspices as well as our own dyeings. It was found that while five of the eight dyes possessed considerable merit as standards, in that the fading was clean-cut and showed a wide range of fastness from poor to good, the spacing was not altogether satisfactory, and the remaining three dyes by the nature of their fading were distinctly unsatisfactory. Our committee rearranged the five good standards, and added one more of our own choosing, and in the 1931 Year Book we proposed these six dyes as tentative standards, and asked for criticisms (the only ones received to date were from Dr. Barker, of the British Wool Industries Research Association, who exposed a set of our tentative standards at Torridon, Leeds, and sent us his comments).

In 1932, however, the German Kommission published an entirely new list of eight wool dyes which they recommended in place of their former selections. This necessitated additional tests by us, to determine whether the new list was an improvement on our own, and we have been conducting these tests for over a year, on dyed samples made by the Germans as well as our own dyeings. In the meantime we have been trying out quite a number of other dyes, in an effort to produce one or two "top standards" by the use of dyes which may be applied to wool in a simple manner (preferably acid dyes) instead of using such dyes as the Indigosols (used by the Germans for the highest degrees of light fastness) which are not convenient to apply and require great care if the same exact shade is to be reproduced each time. All of these trials are still in progress, as it takes nearly two years of sun exposure to complete the testing of one of these very fast dyes. By next summer this work should be completed. We usually make three separate exposures: 1, in the Fade-Ometer; 2, in the sun, under glass, exposed only when the sun is shining, between April and October and between 9 a. m. and 3 p. m.; 3, like No. 2, but continuously day and night and in all weathers. We believe that if we can find seven or eight dyes which in all three tests show a regular gradation of fastness from fugitive to permanent, and all of which fade in a clean-cut manner, showing sharp contrasts between any two periods of exposure, we can properly offer these to the public as standards.

In this connection it is interesting to note that the

(*Continued on Page* 10)

George W. Robertson, who has completed fifty years' service with Riverside and Dan River Cotton Mills. On left, as he appeared when he became overser weaving at Danville in 1884. The second picture was taken in 1887, the third in 1895, and the fourth shows him as he appears today.

George W. Robertson Completes Fifty Years At Danville

BY DAVID CLARK

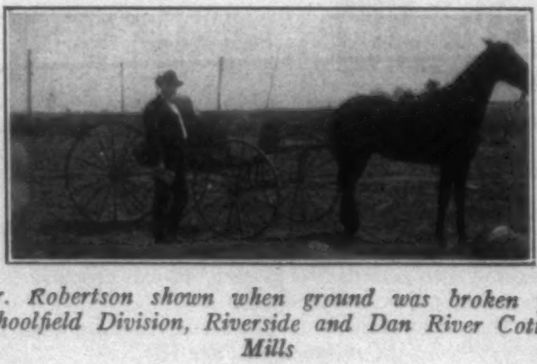
GEORGE W. ROBERTSON went to work at the Riverside Mills, Danville, Va., at noon on January 21, 1883, and on last Sunday, January 21, 1933, completed 50 years' service with that company and its successors, a record which has seldom been equalled in the textile industry.

On last Saturday Mr. Robertson was the honor guest in the vast dining room of Hylton hall, mill clubhouse, where 350 guests gathered to do him honor, to present him with material gifts and other less tangible evidences of their affection. There were out-of-town guests from New England States and from the remote South and in the large group of diners were 192 men and women who have held their posts continuously in the mills for the past 30 years. There were four there who had been in the mills with Mr. Robertson for the last half century.

George Wilmot Robertson was born at Oldham, England, on August 6, 1865.

His father was a machinist in the plant of the Platt Iron Works, manufacturers of textile machinery, but, having accumulated some money, engaged in an export enterprise with New Zealand with unfortunate financial results.

In 1870, when George Robertson was five years old, the father came to the United States and secured a position as machinist at the Eagle & Phenix Mills, Columbus, Ga. The superintendent of the Eagle & Phenix Mills at that time was A. S. Matheson, a name now remembered only by the older men in the industry.



Mr. Robertson shown when ground was broken for Schoolfield Division, Riverside and Dan River Cotton Mills

When George Robertson was twelve years old, he developed a fondness for the river and as he had an attack of scarlet fever, the water gave him ear trouble. His mother went to the Eagle & Phenix Mills and asked that he be given a job during vacations in order to keep him out of the river, and they put him to work as sweeper in the warp dressing room. That was in 1877, which is 57 years ago, and that marks the beginning of a long and interesting textile career.

He went back to school in the fall but the next summer vacation found him as sweeper in the weave room and there he acquired a liking for weaving. Another vacation found him as "handy boy" or helper in the weave room and he began to learn how to fix looms and became very efficient. He also spent some time erecting new looms which came in that summer.

That fall he insisted upon remaining in the mill rather than going back to school and he soon became a regular loom fixer on colored work and almost his entire career since then has been with colored goods. His early work was on cottonades, hickory shirtings, ticking and coarse ginghams.

S. I. Roberts was overseer of the dressing room at the Eagle & Phenix Mills in which George Robertson began his textile career and in March, 1883, secured the position of superintendent of the Riverside Mills, Danville, Va. He wanted Geo. Robertson to go with him but George was at that time the sole support of his mother and was unwilling to take the risk incident to moving.

His mother died in July, 1883, and in October, S. I. Roberts renewed his offer but George again declined.

GOES TO DANVILLE IN 1884

In January, 1884, however, just 50 years ago, Mr. Roberts again sought his services and George accepted.

He arrived at Danville, Va., on the morning of January 21, 1884, and after lunch that day entered the mill as overseer of weaving at the Riverside Mills, which was located upon the river.

The man who is now operating almost 500,000 spindles and more than 13,000 looms, found himself in charge of 100 Thomas Woods looms and 22 Crompton looms, none of which were capable of running faster than 120 picks per minute and no weaver could handle more than four looms. There were 2,240 spindles with which to produce the yarn for the looms.

The munificent salary which had tempted him to move from Columbus, Ga., to Danville, Va., was $2.50 per day and it was above the average paid overseers of weaving in those days.

Although George was only 19 years old at that time, he had been a close student of warp dressing and weaving and he soon had his room turning out a satisfactory production.

T. B. Fitzgerald, father of the late and deeply beloved H. R. Fitzgerald, who entered the mill in 1887, was president of the Riverside Mills when Geo. Robertson became overseer of weaving and R. A. Schoolfield was treasurer and general manager.

Under the operation of S. I. Roberts as superintendent and with Geo. W. Robertson as overseer of weaving, the Riverside Mills prospered and in 1887 No. 2 mill was built which gave them a total of 6,000 spindles and 260 looms. The No. 2 mill was built on the north side of the river, all of the looms moved to the new building. The new looms were Crompton looms.

The space in No. 1 mill was filled with Lowell carding and spinning and Foss & Peevey stationary top flat cards. In 1888 a No. 3 mill was built which contained carding, spinning and weaving.

In 1887, Miss Sarah Murray of East Lebanon, Maine, came on a visit to her brother, who was employed in the Riverside Mills, and at Danville she met young George Robertson. A romance developed and in 1888, at her home in Maine, she became Mrs. Robertson and theirs has been a happy married life.

In 1890, the Riverside Mills purchased the Morotock Mills of Danville and merged them into their organization.

In 1892, No. 5 and No. 6 mills were built on the river with looms being transferred to the new buildings. In 1896 No. 7 mill was built and then the Riverside Mills had 67,650 spindles and 2,751 looms, which was quite an advance from the 2,240 spindles and 122 looms in place when Geo. Robertson began to supervise the operation of their weaving department.

By that time the Riverside Mills were attracting attention not only by their success and steady growth but because of the demand for their goods which resulted from their quality. Buyers in other sections had learned that high quality colored fabrics could be produced in the South.

MADE SUPERINTENDENT OF SCHOOLFIELD DIVISION

In 1902, the stockholders of the Riverside Mills organized the Dan River Power & Mfg. Co. for the development of a power plant and the erection of another mill at Schoolfield, Va., which now adjoins Danville on the south.

Home of George Robertson in Danville

Geo. W. Robertson was sent to Schoolfield to take charge of the project and one of the pictures, herewith, shows him with his buggy on the ground where now stands the magnificent Schoolfield Division of the Riverside & Dan River Mills.

The dam was completed in 1903 and contract let for a mill of 51,968 spindles and 2,000 looms on colored goods with Geo. Robertson as superintendent. The first cotton was put through on Thanksgiving Day, 1904. In 1905 the two divisions were consolidated under their present name, the Riverside & Dan River Cotton Mills.

In 1906, Mill No. 2 was built to make wide sheeting and a bleachery was added. Then they had at Schoolfield 109,656 spindles.

In 1910, under the supervision of Geo. Robertson, they began the erection of Mill No. 3 with 59,392 spindles and 1,500 looms for the manufacture of chambray and similar goods.

In 1914, Mill No. 4 was added with 87,888 spindles, and also Mill No. 5, which is a modern bleachery and finishing plant.

In the meantime S. I. Roberts had passed away and Geo. W. Robertson had become general superintendent of the consolidated Riverside & Dan River Cotton Mills with a total of 467,440 spindles and 13,530 looms.

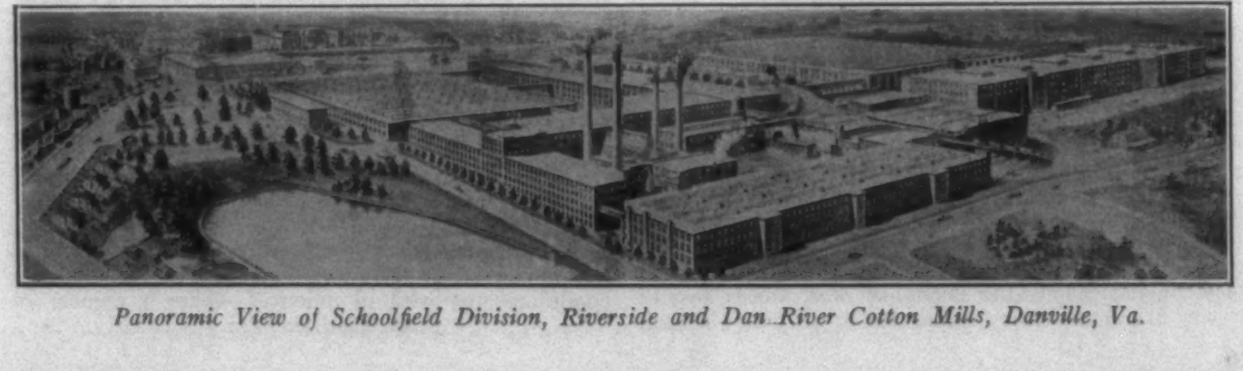
The young man who came to Danville on May 21, 1884, to supervise the operation of 122 looms had made good in the opinion of his employers and the public.

He had supervised or assisted in the purchase of almost 500,000 spindles and more than 13,000 looms. It would take a great mathematician to compile the number of millions of yards of goods which have been purchased under his supervision, but the reputation of high quality of the Riverside & Dan River Mills means more to Geo. Robertson than the number of yards.

During all of these years his health has been remarkably good, but he suffered from a broken leg, acquired in an accident in 1889.

The employees of the Riverside & Dan River Mills love and respect Geo. Robertson and have absolute con-

(*Continued on Page* 8)



Panoramic View of Schoolfield Division, Riverside and Dan River Cotton Mills, Danville, Va.

The Delustering of Acetate Rayon in Hot Baths

THE delustering or blinding of acetate rayon in really hot baths has been a serious difficulty in working acetate material by the dyer, or the consumer who has to launder it. The troublesome characteristic has given rise to various explanations. The one which has gained the firmest foothold is that which accounts for the loss of luster by a partial or complete hydrolysis of the cellulose acetate, it being supposed that a lower acetyl content, in the case of partial hydrolysis, must possess a different and weaker sort of luster or that de-acetylation might produce some alteration of the physical characteristics of the fiber even though when the lower acetylated fiber is produced it might possess a high luster. But this facile explanation has been questioned of late to an increasing degree. According to some researches carried out at the Forschungs-Institut fur Textil-Industries in Dresden, hydrolysis has nothing whatever to do with the loss of luster. Little real work upon the connection between hydrolysis and loss of luster has been published previously.

The first step in the investigation consisted in the treatment of a large number of samples of acetate rayon in baths containing different percentages of alkalies and of acids, at different temperatures, and then in determination of the degree of hydrolysis and of the loss of luster of the treated samples. The surprising observation was made that the luster of the acetate rayon fibers, which had been more or less hydrolized in hot alkaline baths, remained very little altered, while the luster of fibers treated with hot distilled water, or very dilute alkalies or acids, lost their luster entirely, though no detectable hydrolysis had taken place. The results could be summarized as follows: "Loss of luster of acetate rayon fiber begins at temperatures of about 70° C., and increases as the temperature rises beyond this point. The loss of luster is reasonably slight or unnoticeable after a treatment in alkaline baths corresponding to a concentration of N/10 to N/5 of NaOH; the loss of luster increases as the alkaline content decreases. Strong loss of luster of the fiber takes place on treatment with hot water alone, or with dilute or concentated acids. Any connection between loss of luster and degree of hydrolysis could not be observed."

Evidently, in the matting of hot baths, considered, at least, purely from the viewpoint of loss of luster, no chemical breaking down takes place. This point was checked carefully, e.g., acetate rayon fiber was boiled under reflux with distilled water until complete loss of luster had taken place; yet no acetic acid could be detected in the water. Further, such a delustered acetate rayon has precisely the same response toward pH indicators as before. Careful quantitative analysis showed the lustrous and delustered fibers to have the same percentages of C, H, and O. The viscosity of a lustrous and of a delustered acetate mass in acetone was exactly the same. In other words, loss of luster has no necessary connection at all with chemical degradation of the acetate. Careful microscopic study, however, has thrown much light upon the problem.

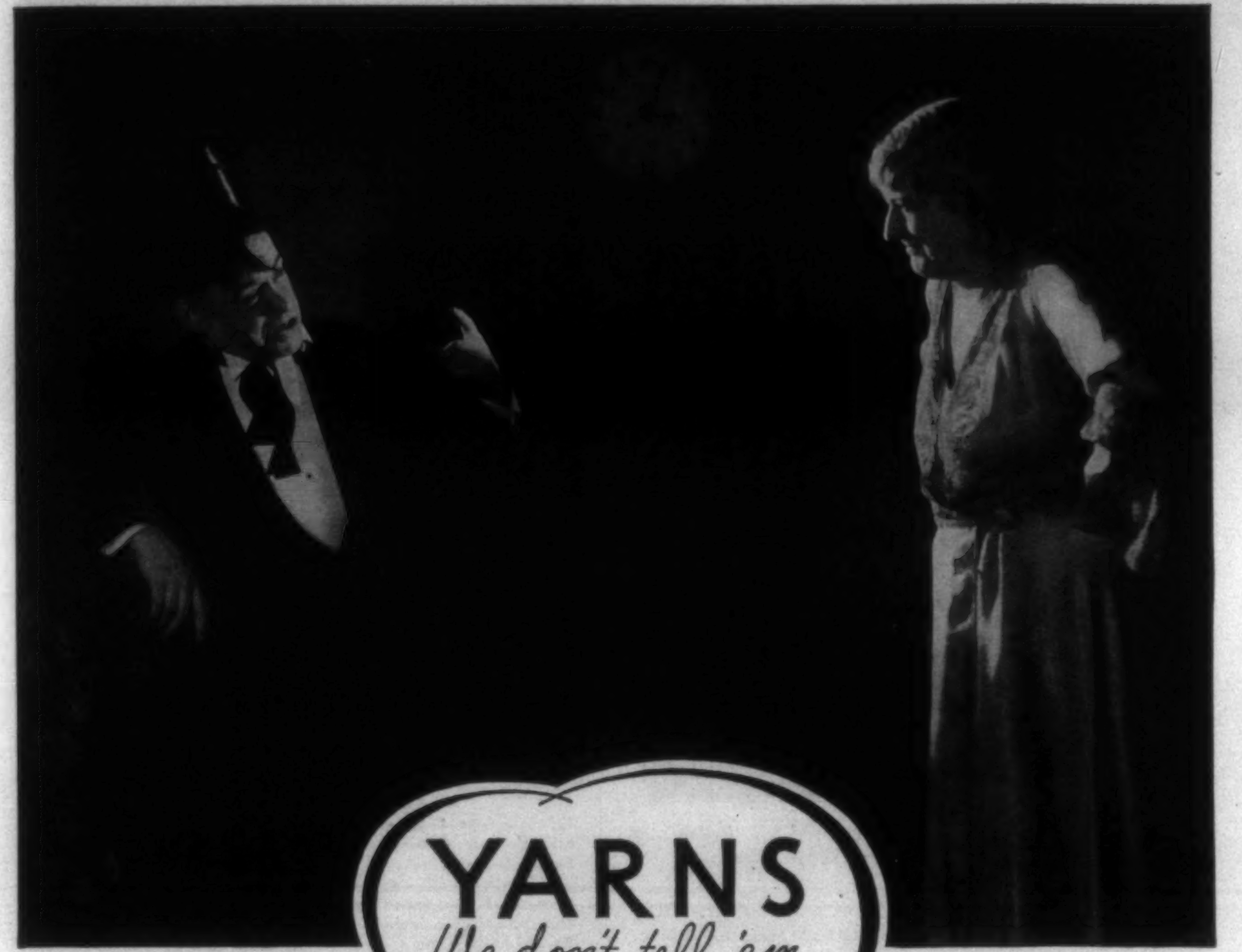
When an acetate fiber which has been delustered by the action, say, of boiling water, is examined under the microscope, the fiber will be found to be full of minute cavities—cracks, bubbles, etc., not only upon the surface, but throughout the substance of the whole fiber. These cracks and cavities evidently originate thus; when the fiber is immersed in water, a certain amount of the water is absorbed as a swelling-agent, and the fibed increases in diameter and height. As the water of the bath is heated, the acetate substance undergoes a certain softening similar to the characteristic plasticity toward tension or pressure in the ordinary fiber. This softening, which must be regarded as a loosening of the cohesion between the ultimate particles or micelles, becomes so pronounced between 70° and 100° C., that the gases dissolved in the water and the bubbles of vapor formed by the coming of the water to the boil, are able to inflate the soft fiber locally, to swell it up where they occur, and even to rupture it and escape, leaving fissures in the surface, or, if still entrapped, remaining as cavities within the fiber. Hollows and crevices remain, of course, in the fiber as the temperature of the bath later sinks; the luster of the fiber as a whole, is now that produced by greatly interrupted and strongly irregular reflection from the manifold adjacent new surfaces lying irregularly in reference to each other, instead of being the uniform and characteristic luster derived from a fairly smooth cylindrical or ribbon-like band: the luster as ordinarily understood is gone—the difference may be compared to the luster of a sheet of glass as compared to what is the case when that sheet of glass is crushed to powder.

The extent of the softening process, and so the degree of loss of luster is dependent upon the content of the fiber in the swelling-agent. If, e.g., a salt solution, which does not greatly swell acetate rayon, is used, the fiber cannot soften to such an extent, and delustering is correspondingly less. Nitro-silk, which does not swell greatly, is correspondingly stable as to its luster.

The whole process seems to differ from that which takes place in the case of cellulose. The latter fiber swells to a greater degree in water than does acetate rayon; the latter, therefore, possesses greater tensile strength when wet (we are speaking of conditions in the cold). But cellulose fibers do not soften at higher temperatures as do acetate rayon fibers. The conduct of the two materials toward salt solutions is also different; cellulose swells more strongly, acetate rayon less so, and its behavior is peculiar; a kind of osmosis takes place, the water alone penetrating into the interior of the fiber and not the dissolved salt.

The present study also proceeded in a third direction; that of clearing up the phenomenon of loss of luster under conditions met with in practice. Quite a number of

(*Continued on Page* 10)



YARNS

We don't tell 'em .. We sell 'em

KEEP OUT OF TROUBLE WITH F. P. YARNS

Some yarns are used just to GET out of trouble

Franklin Process cotton yarns are good for that purpose, too, but they are even better as a means of *avoiding* trouble altogether. These yarns, always dependable, are made by reputable spinners who pride themselves on standardization of quality in manufacturing methods and in raw materials. It is a simple matter to duplicate results that you obtain with Franklin Process yarns. • Franklin Process offerings include all popular counts and qualities — natural, bleached or dyed — in almost any standard put-up. Many numbers are carried in stock in Providence and Philadelphia. • If you are not sure as to the most suitable yarn for your requirements, we shall be glad to make recommendations on the strength of our past experience with a great variety of yarn users. Samples and prices on request.

FRANKLIN PROCESS COMPANY
Yarn Merchants and Yarn Dyers. Also M'f'rs of Glazed Yarns and Machines for Dyeing and Bleaching Yarns in the Package Form, Cotton and Wool Raw Stock, Worsted Tops and Worsted Yarn on Jackspools, also Machines for Soaking Silk. Main Office and Plant at Providence, R. I. Branch Plants at Philadelphia, Greenville, S. C., and Chattanooga, Tenn. New York Office, 40 Worth St.

FRANKLIN PROCESS

COTTON YARNS AND CUSTOM YARN DYEING

Geo. W. Robertson Completes Fifty Years At Danville

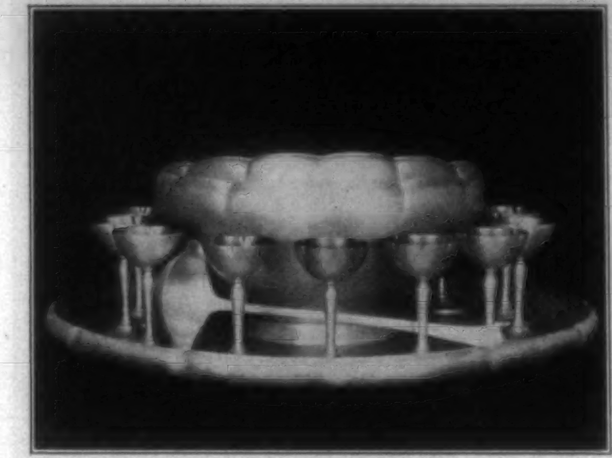
(*Continued from Page* 5)

fidence in his policies. In many families the grandfathers, fathers and children have been his employees and friends.

Only one labor trouble of any magnitude, the strike of about three years ago, has occurred during his fifty years at Danville.

That strike, fomented entirely by outsiders, broke the heart and hastened the death of H. R. Fitzgerald and sorely grieved Geo. Robertson.

He is a member of the Presbyterian Church and has been an Elder for many years. He is a 32nd degree Mason and a Shriner. For many years he was an active member of the Rotary Club of Danville.



Silver Punch Bowl and Goblets presented Mr. Robertson by group of machinery and supply firms

Although he is an extremely modest man who has never sought the limelight and been content to let his accomplishments speak for themselves, we join with the entire textile industry of this country in paying tribute to Geo. Robertson and congratulate him upon the fifty years so well spent at Danville, Va., and the fine service he has rendered to his employers and to the industry.

The Dinner

Robert R. West, president of the mills, presided at the dinner and Malcolm K. Harris, vice-president of the mill, was the toastmaster. A handsome testimonial commemorating Mr. Robertson's long service was presented by Edward M. Johnson, of Providence, R. I. There was also an illuminated scroll expressive of appreciation and signed by the 30 out-of-town guests.

But the gift which touched the recipient the most was a large bound volume containing 7,616 signatures, every person employed in the mill organization, including even the staffs in the New York, Chicago and Atlanta branch offices. With it went a handsome chest containing 7,616 pennies which each person who signed the book contributed. The metal is to be melted down and fashioned into a material tribute.

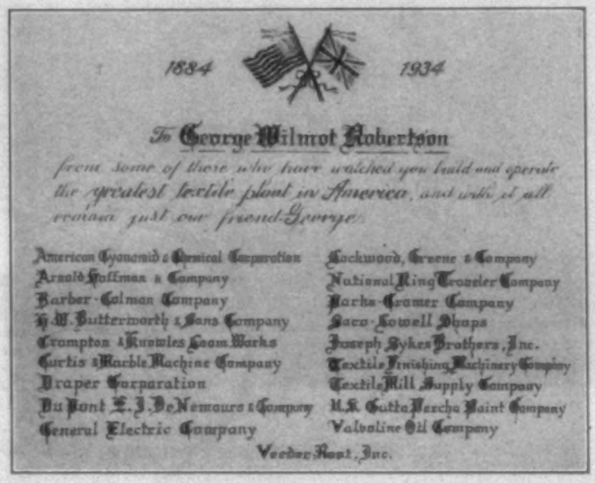
Striking tributes were paid during the evening to Mr. Robertson's fidelity and recognition was given to him for his share in the honor of bringing a small enterprise into national repute through the inherent goodness of the produced goods.

George P. Ray, head of the sales force, read a few of the 100 telegraphic messages which reached Mr. Robertson during the day. Those read came from Providence, Atlanta, St. Louis, Chicago, New York, and one cablegram from Huddersfield a famed British factory center bore him good wishes and Godspeed. Mr. Ray tendered a personal tribute in the joint role of a stockholder, director and employee.

Miss Rose Brimmer, head of Schoolfield's educational activities, alluded happily to Mrs. Robertson, whose duty she said had been "superintending the superintendent." She presented Mrs. Robertson with a sheaf of American Beauty roses. H. E. Spessard, head of the Schoolfield Y. M. C. A., presented the honoree with an anniversary cake.

John M. Miller, of Richmond, presented the tribute of the board of directors, of which he is chairman, in the form of resolutions passed at the last meeting. He alluded to the great accomplishment at Dan River with the aid of such men as H. R. Fitzgerald, R. A. Schoolfield, James I. Pritchett and Robert R. West. The resolutions he said was the seal of affection and admiration for the mill's progress from 2,200 spindles to 465,000.

Hannon Schoolfield, of New York, who is in the cotton yarn business, presented the enrolled scroll which is suitably inscribed calling attention to the long term of Mr. Robertson and bearing the signature of a group of men who longs have had dealings with the mill.



1884 1934

To George Wilmot Robertson

from some of those who have watched you build and operate the greatest textile plant in America, and with it all remain just our friend George

American Cyanamid & Chemical Corporation
Arnold Hoffman & Company
Barber-Colman Company
H. W. Butterworth & Sons Company
Crompton & Knowles Loom Works
Curtis & Marble Machine Company
Draper Corporation
Du Pont E. I. DeNemours & Company
General Electric Company
Lockwood, Greene & Company
National Ring Traveler Company
Parks-Cramer Company
Saco-Lowell Shops
Joseph Sykes Brothers, Inc.
Textile Finishing Machinery Company
Textile Mill Supply Company
U. S. Gutta Percha Paint Company
Valvoline Oil Company
Veeder-Root, Inc.

Card from Companies that presented Punch Bowl and Goblets

J. E. Butterworth, of Philadelphia, in behalf of a group of salesmen, made the presentation of a large beaten silver punch bowl and goblets, while Herbert Martin was called on to offer the simple tribute of the men and women perhaps closest to Mr. Robertson's heart—the "help." Mr. Martin apologized for governmental regulations preventing the presentation of gold and silver. "Silver and gold have we none," he said in the words of St. Peter, "but such as we have we give unto you."

Mr. and Mrs. Robertson were deeply moved by the succession of tributes and moved from the banquet hall to the lobby amidst a rousing ovation.

Basil Browder and Miss Sallye Younge rendered vocal numbers during the evening.

The following out-of-town guests were present: John M. Miller, of Richmond; C. Van Wagenen, of Charlottesville; W. J. Dorworth ,of Philadelphia; George W. Darby, of Baltimore; Ralph M. Wyatt, Baltimore; Sidney S. Paine, of Greensboro; James Strang, of Boston, Mass.;

(*Continued on Page 32*)

The leading and
most progressive bleacheries
of the country use

PERKINS
AUTOMATIC
BIN PILERS

for operating economies and
to improve the quality of their
product.

◆

B. F. PERKINS & SON, INC.
Engineers and Manufacturers
HOLYOKE, MASS.

Research on Fastness To Light Of Dyestuffs

(*Continued from Page* 3)

British Wool Industries Research Association has also developed a set of standards of light fastness, which has now been officially adopted by that organization. We have requested dyed samples of these, and plan to make comparisons with the German standards and with our own tentative standards.

2. *A Study of Fading Lamps.* For several years we have been conducting a series of comparative tests in the Fade-Ometer, an American fading lamp, and the Fugitometer, made in England but quite similar in its fundamentals, in order to determine their relative merits as substitutes for the sun, which of course is still the standard fading unit. This work has been prolonged by the fact that both instruments, particularly the Fugitometer, have been modified from time to time by their makers, which has necessitated much repetition on our part. The dyes used in these exposures (Series 8) are forty in number, specially selected for the purpose, and about equally divided between cotton, wool and silk. The most recent tests include exposures made by Dr. Larose of the National Research Council, Ottawa, Canada, in a standard Fugitometer of the latest type; exposures made by Dr. Hall of the Ontario Research Foundation in an improved Fugitometer designed by himself; exposures made in the new Fade-Ometer, type FDA, and standard sun tests, both made at the Bureau of Standards. In all of these lamp tests particular attention has been paid to the temperature and relative humidity of the air surrounding the exposed samples. This work is now practically completed, and a report should be forthcoming in the near future.

Meanwhile the British Cotton Industry Research Association are experimenting with a 150 amp. high intensity arc for fading purposes, and we have sent them at their request a complete set of Series 4 dyed samples, unexposed (1,127 in number), which they will expose in their lamp and will return to us later for comparison with the similar exposure we have already made in the sun and Fade-Ometer.

3. *The Effect of Different Intensities of Light on the Relative Fastness of Dyes.* We have constructed a fading cabinet at the Bureau of Standards in which samples may be exposed to an arc light under controlled conditions of temperature and humidity, but with different intensities of light (using identical light sources, but varying the distance from the samples). This is now in operation, and will give us much useful information on a subject which has not had enough attention in the past. It is the popular impression that the proper way to make quick light tests is to use a light of very high intensity; but it has already been shown by others that fading produced under these abnormal conditions is quite different from fading produced normally, some dyes appearing faster than they really are, and others more fugitive. Light of unusually low intensity is likely to produce abnormal results also. We plan to make a thorough study of these phenomena during the fall and winter.

The Delustering of Acetate Rayon in Hot Baths

(*Continued from Page* 6)

patents have been granted, dealing with these problems, and they may be classified as follows:

1. Treatments to produce a loss of luster for some special purpose.

2. Treatments to avoid loss of luster.

a—by lowering the temperature of the bath.

b—by addition of protective substances to the bath, to enable a higher temperature to be used.

c—by altering the properties of the acetate silk itself.

3. Processes for regenerating the luster lost in hot processing.

The proposals involved in the patents are so numerous and many-sided, that a practical worker would find serious difficulty in selecting any one in particular for consideration. It would appear that the most simple solution of the problem would be for the manufacturer of the acetate fiber to produce a fiber which will not lose its luster in hot baths. The new nitrate-acetate silk, Aceta, fulfills this condition, without losing the character of an essentially acetate-silk fiber, and without simply replacing the one difficulty, of loss of luster in hot baths, by other difficulties, different but equally serious.

With the usual acetate silk, however, at least the condition of working below 70° C. will entirely obviate the trouble. Some processes, though, encounter difficulties below that temperature, e.g., in the degumming of natural silk-acetate rayon mixed weaves, the desired result cannot be attained below 70° C. Addition of various substances proposed, to force the desired reaction to take place below 70°, usually involves danger of damage of some sort to either the natural or the acetate rayon. The other most evident possibility of protecting the acetate silk from matting, though worked at a high temperature by use of some salt solution instead of water is of more promise. If a slight loss of luster is allowable, or desirable for purposes of contrast in a mixed weave, the amount of such a salt in the bath may be very small indeed. And, finally, the third possibility, 3, is in some cases also of great promise. With a suitable agent for relustering the matted acetate silk, one could proceed, even quite recklessly, with hot-bath treatments without any regard to the temporary loss of luster of the acetate silk, since it can in some cases be restored to as high a degree as existed before loss.

It should be noted, however, that the restoring of the luster lost may impart a somewhat different character of luster unless the agent used is one which possesses about the same refractive index as the acetate mass, and can be so applied as to fill in smoothly the surface fissures. Even then, nothing can fill in the "blow-holes" within the substance of the fiber, and not communicating with the surface. But such considerations as these are of only scientific interest, not practical, as the consumer will never notice anything, except that the material has a good luster.—Kunst-Seide, 14, 153.—*Translated by Textile Manufacturer.*

Uniform Hosiery Cost System

A final draft of the proposed uniform cost system for hosiery mills is expected to be submitted to the Hosiery Code Authority in the immediate future, and the system will probably be made effective for all mills shortly thereafter.

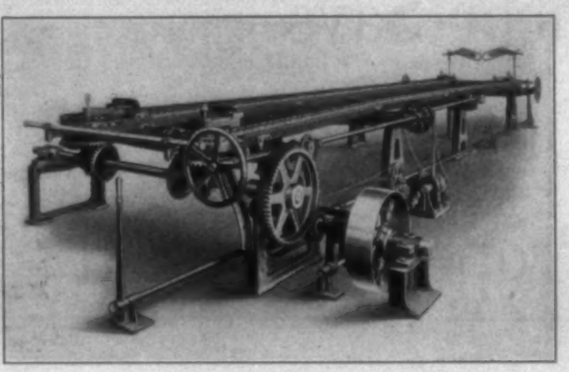
Reported cases of low prices which appear to be under cost will be checked and prompt action taken by the Code Authority to prevent repetition, it is stated.

SKF Moves Offices To Philadelphia

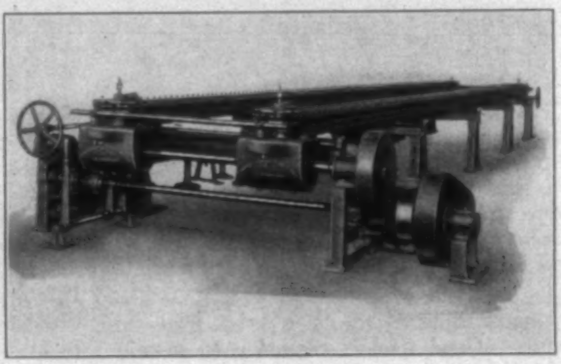
SKF Industries, Inc., has moved its general and executive offices from New York to Front street and Erie avenue, Philadelphia. The move is made to consolidate the manufacturing, sales and engineering facilities of the organization.

THE MARCH of PROGRESS

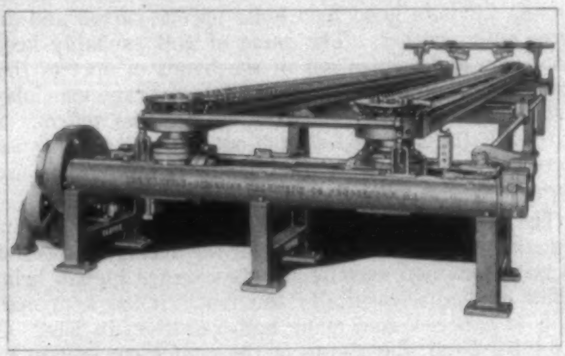
1914



1924



1934



The improvement in Textile Tenter design illustrated herewith is only one example of the many advances made in our up-to-date Finishing Plant Equipment.

Our Sales Engineers are available at any time, under no obligation to you, to call and discuss our Modern Equipment with you.

The Textile-Finishing Machinery Co.

New York Office
50 Church St

Providence, R. I.

Southern Agent
H. G. Mayer, Charlotte, N. C.

Manufacturers of Machinery and Equipment for
BLEACHING, MERCERIZING, DYEING, DRYING, PRINTING, FINISHING
and SANFORIZING TEXTILE FABRICS

Mill Engineer Says Stretch-Out a Blessing When Properly Applied

SIDNEY S. PAINE, well known textile engineef of Greensboro, N. C., whose address at a group meeting of the Southern Textile Association some weeks ago attracted a great deal of attention, discussed the stretch-out system and its application in an article in the *Journal of Commerce* this week. His remarks will be found of unusual interest by textile men and are reprinted herewith.

Almost every good thing in life, if abused, leads to unfortunate results. Good food is necessary to sustain life, yet good food taken in excess ruins one's system. Certain kinds of good food build up one person and disagree with another. The game of golf probably keeps more men and women out of the hands of doctors than any other form of exercise, yet if the average man plays golf too much during the week his business suffers. So it is with the so-called stretch-out system. When used correctly, it is a blessing to all concerned, but when used improperly it is quite the reverse.

The stretch-out system is a rather vicious name for something that is as necessary for the average cotton mill as good food and exercise for the average human being. When applied scientifically and fairly, it has kept many mills in existence and many mill operatives in jobs. On the other hand, the abuses of the stretch-out system unquestionably have worked unfair hardships on many operatives with consequent unfortunate results to both the operatives and to the mill itself.

A brief glance at the history of cotton mill development shows that the stretch-out system is a perfectly natural development and is something that we all must go through. Consider very briefly this recent history.

In this discussion let us confine ourselves primarily to weaving, as more attention has been focused on extension of the number of looms that a weaver can run than on any other single part of the mill.

At the beginning of this century, automatic looms, speaking in a commercial sense, were unknown. Cotton mills were almost entirely equipped with non-automatic looms with the old hand-threading shuttle. Weavers were running from six to ten looms and doing all of the work from sweeping the floor to sucking the shuttle, except loom fixing. The amount of cloth that a weaver could turn off was comparatively small. Partly because the supply of cotton was so large and because silk fabrics have always been considered superior, cotton cloth had worked itself into the position of being a cheap fabric. Therefore, with low cloth prices and a small production from hand-threading looms, the weaver's wages have always been low compared with the wages received by important workers in other major industries. Between 1900 and 1910 automatic looms were seriously introduced and the most progressive mills started to put them in. This movement grew so rapidly that by 1929 practically all looms on plain fabrics and about 70 per cent of looms on all fabrics, no matter how fancy or how fine, were automatic.

With the introduction of the automatic loom the number of looms that a weaver could run was established on a rather hit and miss basis. Up to 1920 mills were running on a rather individualistic basis. In other words there had been very little scientific study made of causes and effects.

AUTOMATICS FORCED CHANGES

When the automatic looms were first put in it was a self-evident fact that a weaver could run more automatic looms than non-automatic, because she did not have to suck the shuttle, and it was estimated that on most fabrics a weaver could run from two to two and one-half times as many looms. Therefore, regardless of cotton, yarn, or machine conditions in the preceding departments, it became popular for a weaver to run from sixteen to twenty-four looms, filling her own batteries. The saving of this system over the non-automatic looms was so satisfactory and the mills with automatic looms had such a decided advantage that no questions were asked as to the probable number of looms that a weaver might run.

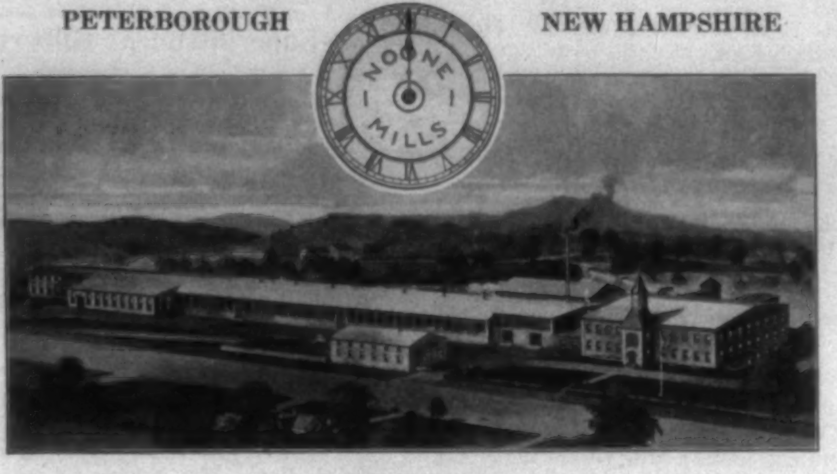
On the other hand in many locations there was a great prejudice against the automatic looms by both mill managers and operatives. On the one hand weavers objected strenuously to running so many looms. This objection was made on general principles rather than on a scientific study. Managers of mills that had the non-automatic contended that automatic looms were all right to make rags but that first class prints and finer cloth could not be made from automatic looms. Mills making fine goods declared it was insanity to think of using automatic looms because the cloth would be very inferior, because it was claimed that wherever automatic looms were installed the better class of help moved out and the riff-raff moved in, and some mills went so far as to claim that they could

(*Continued on Page 22*)

The Joseph Noone's Sons Company

A. Erland Goyette, Proprietor

PETERBOROUGH **NEW HAMPSHIRE**



Established 1831

Noone's Standard Roller Cloths

Insist on Noone's Standard Roller Cloths for your Spinning Rolls. Noone's have been Standard since 1831.

Results and costs are what count most.

Use Noone's Roller Cloth and be assured of a Strong Round uniform yarn, the best obtainable. Eventual cost, less than any other covering.

Good spinning can always be obtained when Noone's Roller Cloth is used, as it is the properly built Cloth,—has the correct cushion and consistency, and uniform gauge.

Noone's is best by test.

Many materials have been used for Spinning Roll Covering in years past, but have eventually been discarded in favor of the dependable Woolen Roller Cloth and Leather.

Do not be misled, put your faith in the good Old American Products: Noone's Roller Cloth and leather. If in doubt, allow us to demonstrate the superiority of our Roller Cloth and a leather cot.

Use Noone's Cloths and be convinced.

Noone's are the Pioneers in Mechanical Cloth Manufacturing in America.

Southern Office
11 James Street
Greenville, S. C.

WILLIAM R. NOONE & COMPANY
Selling Agents
ARNOLD T. MALONE, Manager
105 Washington Street Boston, Mass.

INSTITUTE FOR RESEARCH IN SOCIAL SCIENCE

PERSONAL NEWS

W. G. Hardy has resigned as superintendent at Manville-Jenckes Mill at High Shoals, N. C.

W. E. Daniels is now overseer weaving, Manville-Jenckes Mill, at High Shoals, N. C.

L. C. McAllister, of Danville, Va., is now overseer spinning, Cartex Mills, Salisbury, N. C.

J. W. Toomey, of China Grove, N. C., is now master mechanic, Cartex Mills, Salisbury, N. C.

A. F. Harlin has resigned as vice-president and sales manager of the Blue Bell Overall Company, Greensboro, N. C., having sold his interest in the company.

W. E. Williams has become assistant superintendent of the Dadeville (Ala.) plant of the Alabama Mills Company.

Robert Adams, formerly overseer spinning, Sibley Manufacturing Company, Augusta, Ga., is now superintendent of the Saratoga-Victory Mill, Guntersville, Ala.

Nathan M. Ayers has joined the Triangle Hosiery Mills, High Point, N. C., as treasurer. He was formerly with the Southern office of the Bigelow-Sanford Carpet Company.

Mrs. Edith McLeod Smithey, who has held the position of secretary of the Hannah-Pickett Mills, Rockingham, N. C., for more than 15 years, has resigned. Her position has not yet been filled.

E. W. Knight, formerly second hand twisting, Martha Mills, Thomaston, Ga., is now foreman of the No. 2 shift in the spinning department of the Santee Mills, Orangeburg, S. C.

James W. Cox, Jr., formerly president of the Sibley and Enterprise Mills, Augusta, Ga., will shortly motor to Miami with Mrs. Cox, where they will go to Nassau in the Bahamas, for a month, stopping at the New Colonial Hotel. Mr. Cox expects to be back in New York the first part of March.

Add to Board of Textile Institute

Ernest N. Hood, treasurer, Naumkeag Steam Cotton Company, Salem, Mass., and for many years a member of the board of directors of the Cotton-Textile Institute, has been elected a member of the executive committee of the board.

E. M. Phillippi, vice-president of American Thread Company, and George R. Urquhart, president, Manville-Jenckes Corporation, Manville, R. I., have been elected to the board of directors of the institute.

Narrow Sheetings Sub-Committee

George A. Sloan, president of the Cotton-Textile Institute, announced on behalf of the Cotton Textile Code Authority the appointment of a Narrow Sheetings Sub-Committee of the Code Authority, to consist of the following:

Robert Amory, Boston, Mass.; D. W. Anderson, Pacolet, S. C.; A. H. Bahnson, Winston-Salem, N. C.; S. Marshall Beattie, Greenville, S. C.; Lanier Branson, Graniteville, S. C.; James Chapman, Jr., Spartanburg, S. C.; Elroy Curtis, New York City; Norman Elsas, Atlanta, Ga.; C. W. Mizell, Opp, Ala.; R. C. Moore, Charlotte, N. C.; Fred W. Symmes, Union, S. C.; W. J. Vereen, Moultrie, Ga.

At the recent meeting of the narrow sheetings manufacturers held in Atlanta, Ga., S. Marshall Beattie was unanimously elected chairman of the committee.

Superintendent Gilbert Entertains

On Friday night, January 12th, Superintendent C. L. Gilbert, of the Darlington Manufacturing Company, and Mrs. Gilbert gave their annual dinner of turkey and opossum to the overseers and friends. The occasion was enjoyed by all, and after supper they were entertained by several tables of cards and other games. The following attended the supper:

Luther Knowles, of the Clinton Starch Company; toastmaster, M. M. Yates, assistant treasurer of the Darlington Manufacturing Company; J. C. Stroud, carder; W. F. Pettit, spinner; G. L. Gilbert, weaver; W. A. Jordan, cloth room; W. F. Fleming, bookkeeper; J. A. Hudson, electrician; V. B. Lindsey, chief engineer; W. H. Truett, yard; S. A. Jeffords, manager, A. & P. Store; J. T. Jeffords, Garrison Rogers, Mrs. S. A. Jeffords, Mrs. M. M. Yates, Mrs. Luther Knowles, Mrs. G. L. Gilbert and Mrs. Fannie Lovelace.

Tribute to Lippitt

The following resolutions were adopted by directors of the Cotton-Textile Institute following the recent death of Senator H. F. Lippitt:

"Whereas, at this critical time in the life of our country the leadership and co-operation of outstanding industrial executives are essential to recovery and reconstruction; and

"Whereas, in the death of Senator Henry F. Lippitt the nation and the cotton industry have lost such a leader, one who served his State as one of its outstanding citizens, his nation with credit and distinction, and his industry with foresight and wisdom; and

"Whereas, the Cotton-Textile Institute has lost one of its founders and most progressive counsellors who never failed to respond to every call of the organization, and the members of the Institute have lost a most dear and valued friend;

"Now therefore be it resolved, that we record our most heartfelt tribute to the memory of Henry F. Lippitt, friend, associate, counsellor, philosopher and statesman.

"Resolved, further, that this memorial be placed in the archives of this Institute in testimony to his life and work and that copies of these preambles and resolutions be sent to Mrs. Lippitt and to his business associates in this Institute."

Textile Chemists To Meet

The winter meeting of the Piedmont Section of the American Association of Textile Chemists and Colorists will be held Saturday at the King Cotton Hotel, Greensboro, N. C.

The meeting will be held in two sessions, technical discussions being scheduled at a meeting from 3 to 5 o'clock in the afternoon, and a mixed program of business and pleasure being planned for a banquet at 7 o'clock that night.

P. H. Scott, of the DuPont Company, will present a paper on "Fastness of Dyestuffs as Self Colors and in

Combinations" at the afternoon session. Other persons on the program will be John Bothamley, of the Arkansas Company, Inc., New York, who will read a paper on "Preparation of Piece Goods for Kier Boiling," and Prof. A. H. Crimshaw, of North Carolina State College, vice-president of the organization, who will speak briefly on "National Mercerization Research Committee.'

At the banquet, Edmund B. Besselievre, sanitary engineer of the Dorr Company, Inc., engineers, of New York, will deliver a talk on "Preparation of Water for Industrial Use and the Treatment of Industrial Wastes."

Onyx Men Have Meeting

Attended by 50 key men of its organization, including executives, salesmen and chemists, the annual sales meeting of the Onyx Oil & Chemical Co., Jersey City, N. J., was held recently at its plant in that city. Representatives from its Southern, Midwest and New England territories joined the meeting.

At the daily meetings, various papers prepared by chemists on the Onyx staff were read. Victor H. Berman, president, discussed "Boiling-Off, Dyeing and Finishing of Acetate Rayons." Dr. Moshier, head of the research department, covered the subject, "The Seresine Fractions of Silk." Charles E. Maher, Chicago representative, told of "Recent Developments in Hosiery Finishing." E. W. Klumph, Southern representative, gave a talk on "Wetting Out Agents in Mercerizing."

The week's discussions were climaxed by a banquet at the Jersey City Elks Club. Mr. Berman addressed his associates, stressing as his theme the fine esprit de corps and loyalty shown by every member of the Onyx organization, which made possible the steady growth and increase of friends throughout the textile industry.

Final adjournment was made to the home of Mr. Berman, where the group was given the "run of the house," ending a profitable week in true holiday style.

OBITUARY

WILLIAM A. SCHOENHEIT

Asheville, N. C.—William A. Schoenheit, 64, president of the Spray, N. C., Cotton Mills, Inc., died at his home here Saturday afternoon after an illness of several days. He became president of the mills in 1922. A native of Cleveland, O., Mr. Schoenheit moved here in 1890.

Besides a son, Dr. Edward Schoenheit, he is survived by three sisters and one brother.

Funeral services will be held from the residence, 52 Von Ruck Road, this afternoon at 3:30 o'clock. Interment will follow in Riverside Cemetery here.

J. S. COVINGTON

Rockingham, N. C.—John Stansill Covington, 52, died at his home here. He suffered a heart attack Christmas eve and had been confined to his bed ever since.

He was secretary and member of the old cotton firm of W. T. Covington & Co., who handled all the cotton for the ten cotton mills here. He had a wide acquaintance in textile circles.

WILLIAM HOVIS

Rock Hill, S. C.—William Hovis, 64, for thirty-three years overseer of carding of the Highland Park Manufacturing Company, Unit No. 2, and for the past six months associated with the Industrial Cotton Mills Company in a similar capacity, died at his home here Friday.

Textile Labor Problems Under Unified Control

Greenville, S. C.—Confirmation for the plan whereby all textiles will be placed under the supervision of the National Industrial Relations Board was forthcoming from Bennett E. Geer, member of the group, who also announced that a meeting to go over the general situation would be held here next week.

"A complete set-up of plans for arbitration for operatives in every branch of the textile industry will be worked out," Mr. Geer said. "This task will be tremendous. General ideas have been laid out, but details must be considered."

The board meeting here will be the first since the scope of activities was enlarged and is held to be of prime importance. Date will be definitely set by Dr. Robert Bruere shortly.

Southern Hosiery Manufacturers Meeting

The general meeting of the Southern Hosiery Manufacturers' Association, referred to in the previous notice, is to be held at the Battery Park Hotel, Asheville, N. C., at 10:30 o'clock a. m., January 27, 1934.

At this meeting the charter and by-laws will be adopted and officers and directors elected. Policies and objectives to be attained will be fully discussed, and a full attendance is desired in order that all phases of existing conditions may be covered, says a statement from T. R. Durham, secretary.

Among the things the Association expects to accomplish, Mr. Durham cites the following:

"To assemble and disseminate information on subjects of mutual interest such as production, stocks, prices, taxes, insurance, legislation and traffic regulations. To serve as a clearing house of ideas and problems affecting the industry. To formulate plans for a common understanding and, if desirable, the adoption and maintenance of definite policies respecting sales practices, the making of contracts and acceptance of orders."

Cotton Mill Activity Lower in December

Washington.—Activity in the cotton spinning industry in December was at the lowest level touched since August, 1932, it is disclosed by the monthly report of the Census Bureau.

Only 24,840,870 of the 30,938,340 spindles in place were active during the month, against 25,423,348 in November, it was reported, while the total active spindle hours declined from 6,796,420,109 to 5,095,047,829, the average per spindle in place dropping from 220 to 165 hours.

While the decline in active spindles was most marked in the New England States the heaviest drop in active hours was in the cotton-growing area, the bureau announced. In the South, active spindles declined from 17,418,032 to 17,338,794, while total active hours dropped from 5,027,502,369 to 3,804,108,831, bringing the average from 262 to 198 hours. In New England, the number of active spindles dropped from 7,296,192 to 6,815,136, while active hours declined from 1,609,083,442 to 1,176,147,399, the average dropping from 151 to 110 hours, while in all other States active spindles dropped from 709,124 to 686,940, total active hours from 159,834,298 to 114,791,599, and the average from 155 to 111 hours.

BUNCHLESS
REG. U. S. PAT. OFFICE
AUTOMATIC
CLEANER

UNITED STATES
PATENTS
1930—No. 1,781,142
1932—No. 1,857,410
1932—No. 1,858,118
1933—No. 1,892,751
1933—No. 1,932,027

Wm. B. Walker
Sou. Rep.

FIRTH-SMITH
COMPANY
BOSTON, MASS.

TUFFER
AND
LIGHTNING

Lightning is said never to strike twice in the same place. The Tuffer Card Clothing you are using today and the Tuffer you put on your cards tomorrow couldn't strike closer to your specifications. Patented foundation, selected wire, constant supervision and inspection keep it absolutely uniform.

Howard Bros. Branch Offices and an Atlanta Factory are maintained to give you immediate delivery and service.

TRADE MARK
TUFFER
REG. U.S. PAT. OFF.
HOWARD BROS. MFG. COMPANY
Home Office and Factory, Worcester, Mass.
Southern Plant
244 Forsyth Street,
Atlanta, Ga.
Branch Offices
Philadelphia, Pa., Dallas,
Texas, and Washington, D. C.

Hosiery Industry Back on Five-Day Week

The hosiery industry reverted Monday to a five-day production week, thus discarding the five weeks of emergency curtailment through authority of the Hosiery Code Authority.

Explanation of the step is that stocks of hosiery on ahnd are no longer burdensome and that the time is now here when spring demand should assert itself.

In the Code Authority's communication to Byres H. Gitchell, deputy administrator, recommending that the term of temporary curtailment be not extended, it is pointed out that the decision was based on a statistical survey of the industry, covering the four weeks of December 18th to January 13th.

"This survey," the letter of the Code Authority states, "disclosed the following facts:

"1. That the period of curtailment was characterized by a relatively low level of shipments from manufacturing establishments. The Code Authority anticipated that shipments would be below normal for this period, and, on this basis, recommend the curtailment program.

"2. That while mentioned level of shipments was low, it exceeded production for the same period of time, thus reducing stocks on hand. The curtailment program thus acted to prevent disastrous accumulation of stocks in the unusual period just ended.

EXPECTS SEASONAL DEMAND

"3. That it is safe to assume that in the very near future the industry will resume normal operation and experience regular seasonal demand for its product.

"4. That present stocks on hand are no more than sufficient to meet expected normal requirements. Further decreases in stocks will hinder the industry's ability to meet these normal requirements.

"5. That a further extension of the curtailment period might possibly operate to the detriment of the consumers' interests.

"6. Practically all mills in the industry operated under the curtailment order. A few exemptions were granted, mostly for limited periods of time. The curtailment program has thus been generally and uniformly effective.

NEED FOR MORE HOURS CITED

"7. That, by virtue of such curtailment, the industry generally was compelled to operate the full number of machine hours granted them under curtailment in order to meet demand. It is obvious that operations for a greater number of hours are now necessary to meet expectable demand.

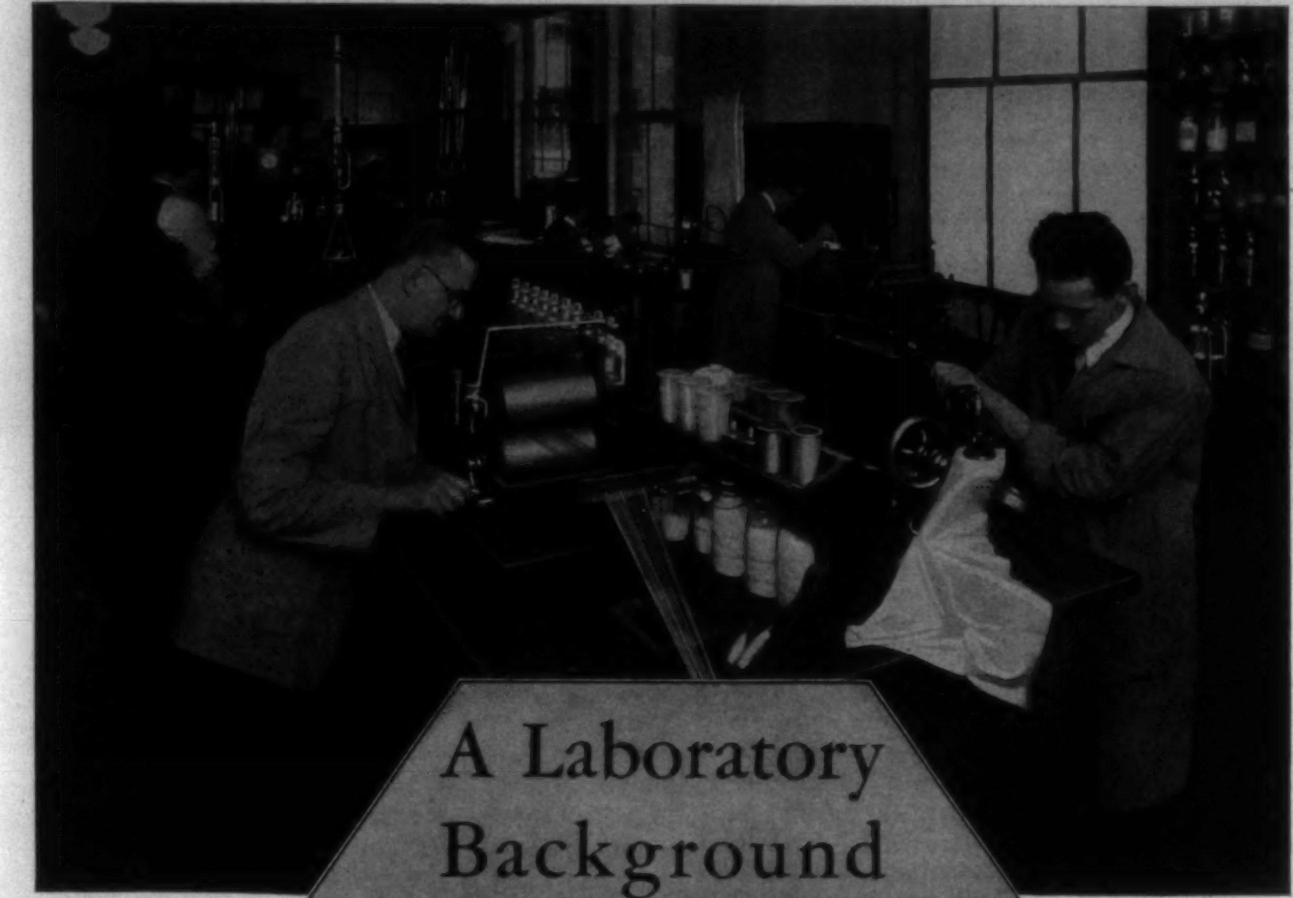
"8. That the effect of the curtailment order in no case operated to increase prices; it substantially maintained prices. Scattered declines occurred mainly in one branch of the industry.

"Based upon these findings and facts, the Code Authority confidently recommends that the necessities of the hosiery industry do not require the extension of curtailment for any additional period beyond January 20, 1934.

"The Code Authority desires to commend the industry for the spirit of co-operation it displayed in effectuating the curtailment order.

"Respectfully yours,
"HOSIERY CODE AUTHORITY,
"EARL CONSTANTINE,
"Executive Director."

The acknowledgment of the deputy administrator, Mr. Gitchell, states that an extension "of the curtailment order of December 14, 1933, will not be recommended to the administrator for industrial recovery."



A Laboratory Background for your Protection

Supplemented by a large staff of technically-trained field men, the four Stein Hall laboratories can provide expert aid in the solution of your problems, *without expense to you.* Stein Hall laboratories assure you of the uniformity and reliability that has made Stein Hall products so universally successful—sizing material for cotton or rayon warps—thickeners for printing with every type of color—starch, dextrines or gum supplies for every kind of finish.

Be certain—specify Stein Hall products!

NRA
MEMBER
U.S.
WE DO OUR PART

STEIN, HALL & COMPANY, INC.

EST. 1866

285 MADISON AVENUE SH NEW YORK CITY

BOSTON PROVIDENCE CHICAGO PHILADELPHIA CHARLOTTE SAN FRANCISCO
TORONTO ROCHESTER BUFFALO LOS ANGELES

HEADQUARTERS FOR ALL TEXTILE STARCHES, DEXTRINES, GUMS AND TAPIOCA FLOURS

TEXTILE BULLETIN

Member of
Audit Bureau of Circulations and Associated Business Papers, Inc
Published Every Thursday By
CLARK PUBLISHING COMPANY
Offices: 118 West Fourth Street, Charlotte, N. C.

David Clark — *Managing Editor*
D. H. Hill, Jr. — *Associate Editor*
Junius M. Smith — *Business Manager*

SUBSCRIPTION

One year, payable in advance — $2.00
Other Countries in Postal Union — 4.00
Single Copies — .10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

A Retailer's View

The average mill man, we know, doesn't feel very close to the retailer. A manufacturer who sells yarns or cloth in the gray doesn't spend much time thinking about what the retailer is selling to his customers. At the same time, it is rather obvious that no matter what be the product of your plant, sooner or later it has got to go over the retail counter. Even the mill that seems farthest removed from the retail shelf isn't very far away at that. The mill making tire cords, for example, is pretty much dependent for a livelihood upon the number of customers who buy tires at retail.

In the case of the mill making a finished product and selling direct to the trade, it is of course a different story, but rather an exceptional one as Southern mills go.

At any rate, we had a rather illuminating talk with a retailer a few days ago. He has a big job, being in charge of sales of one of the largest department stores in the Carolinas. He's smart, too, as most of the big retail folks are. Otherwise he would not have been able to live through the past few years. And whether the mill men want to believe it or not, the retailers keep a much closer check on what the mills are doing than the average manufacturer seems to think.

To begin with, we asked this retailer, just to open the conversation, "How is business?" He said that he was selling just about twice as much as he sold a year ago. "I think," he says, "that if you checked up with every department store in this section you would find that the average one is selling about twice the yardage in cotton goods that he was selling a year ago. We are doing that, and I understand it is an average condition." So much for that. We didn't start out to give you a story on how much better business is now, but the good news will just out.

"What about prices?" we asked him. Cotton goods, for a number of mighty good reasons, are a whole lot higher than they were a year ago.

"We are not bothering about price advances," the retailer said. "As a matter of fact, the retailer is afraid of very low prices. Give us a period in which quotations are ridiculously low, and we just naturally shy off. We can't get over the feeling that when things are dirt cheap something is going to pop, and we are going to be able to pick up goods for nothing. Such a condition scares us out of the market, we just don't buy, that's all."

He went on to say that in a time of very low prices, when it is perfectly obvious that there is an overproduction of all kinds of goods, retailers buy only from hand to mouth. They won't cover ahead under such circumstances, he said. On the other hand, when prices are advancing, it is a different story. "Most anybody," he told us, "feels good when he buys something today and finds that the price is higher tomorrow. He not only feels good, he feels smart about it."

If the cotton manufacturers believe that the retailers are not keeping up with the trend in merchandising, with particular reference to production, they have got another guess coming, this man told us.

For example, he cited the case of a hosiery salesman who called on him sometime ago. He offered a line of hose at a very low price. "I didn't buy," he explained, "because I was afraid of the price. It was too low. I figured that if the hosiery business had sunk to such low levels, somebody would go broke soon, and we would get his stock for almost nothing. Now the hosiery mills have been controlling production, prices are rising and we are not afraid to take a chance."

Asked if people were complaining about increased retail costs, our friend said he had found very little consumer resistance to higher prices. "Folks are buying now, because they need goods and the confidence is coming back. That seems to be the whole story."

When questioned about the advance in prices that the retailers are paying, he showed no alarm at all.

"For example, in cotton goods," he said, "we are paying just twice as much for percales as we paid a year ago. And we like it. We never have gotten hurt in any advancing market. It is just human nature to buy when things are going up and to stall when prices are apparently getting lower every day. Can we pass the advances along? Well, we are doing it every day."

It strikes us that there is a lesson here for the manufacturers. After all is said and done, retail trade offers about the only outlet for any kind of cotton goods. When production is running out of bounds and goods are piling up, to force prices down, there is mighty little business for anyone in the picture.

On the other hand, when stocks are kept at safe levels and prices are high enough to show a profit to everyone concerned, business is called good.

We can't recall a single period in which goods prices were forced below production costs by the oppressing weight of piled up stocks, when anyone, from manufacturer to retailer, was happy.

Quality Is Worth the Cost

In the past few years there has been a tendency to forget quality for the sake of a dollar in the hand. Price has been the big factor in about everything anyone bought.

Manufacturers of quality products have suffered from "gyp" competition in almost every line. This has been especially true in mill supplies of all kinds. The dollar mark has loomed larger than any other consideration. In too many instances, stuff bought at what looked like bargain prices turned out to be no bargain at any price.

A manufacturer of bobbins and spools, to cite a case in point, tells us that during the depression, they kept their products on the same quality basis that they have always done. Naturally their prices were higher than those of some of their competitors who went out after business purely on a basis of price. A lot of buyers could not see any further than the price mark. It is rather hard to blame them under the circumstances, but they wound up by paying a high price for cheaply priced goods that proved very expensive to use.

What applies to bobbins and shuttles also applits to many other things that the mills have been buying for the last few years. They followed a natural impulse, even though a costly one in the long run.

From what some of the superintendents and overseers tell us, they have had stuff pushed off on them in recent years that no treasurer would have thought of buying when business was better. A short-sighted policy, no doubt, that never saved a cent for anyone.

From what our friends in the mills and on the road tell us now, the trend is just the other way. Manufacturers, now that they don't have to stare every dollar out of countenance before they pass it along, are again giving their business to reputable firms that charge a fair price for a quality product. The "bargain days" are apparently over and with them the false sense of economy that never looked behind the price on the order blank.

Dollars

There has been a great to-do over what kind of dollar we are going to have after the present dollar program is carried through by the Administration.

The whole question of money is too deep for us to understand and apparently too complex for those who have been trying to make it clear to us. Few people, if any, seem to know anything about money.

One of the Brain Trusters, Prof. George F. Warren, of Cornell University, monetary adviser to the President, lists the following benefits that he said might be expected by the country at large through the dollar devaluation program. Here they are:

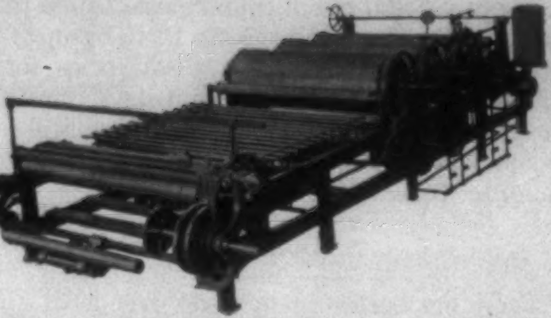
1. Raise prices.
2. By raising price, make it easier to pay debts.
3. Resume profits to business, making wage increases possible.
4. Stimulate business and increase employment.
5. Help the debtor classes—home owners, farmers and others owing money.
6. Improve the condition of insurance companies.
7. Help those to whom money is owed by making it possible to collect debts.
8. Give security to salaried people in danger of losing jobs or suffering pay cuts.

Markets Continue Active

The market for cotton textiles continued to show an active and healthy tone during the past week. Sales in a number of lines were heavy and prices were strong. The large buying in the past several weeks has strengthened the position of the mills and should help them in getting prices on a better basis.

Business, contrary to its usual course after the turn of the year, improved greatly, the usual period of several weeks' dullness in January having been displaced by active trading.

There are many indications that more buying will be needed during the first quarter and market sentiment continues very optimistic. The outlook is generally regarded as more cheerful than it has been in a long time.



a few reasons why

More than 6 times as much rayon and acetate yarn is sized on "JOHNSON'S as on all other rayon sizers in the world combined—

1—May be used for all types of yarn of any denier, number of ends and sley. For both silk and cotton system of processing.

2—Recommended by all leading yarn manufacturers. (One of the greatest in the world employs 70 Johnson sizers. Another more than 60.)

3—Made by specialists—our continued efforts of years have resulted in providing for our IMPROVED RAYON WARP SIZER every feature required for successful sizing.

4—Not 1% replacement or repairs since the first machine was built.

CHARLES B. JOHNSON

PIERCY and HOLSMAN STS., PATERSON, N. J.

Representatives

Joseph Barnes
New Bedford, Mass.

Carolina Specialty Co.
Charlotte, N. C.

Elbrook, Inc.
Shanghai, China

30% TO 50%
more working light . . .

Walls and ceilings finished with Sherwin-Williams Save-Lite Mill White increase working light 30% to 50%. This finish softly DIFFUSES every ray of light, NATURAL or ARTIFICAL, to every portion of rooms. Better working light means less spoilage—less loss—more profit.

SHERWIN-WILLIAMS

STANDARD PRODUCTS FOR TEXTILE MILLS

TEXTILE OFFICES: Philadelphia, Charlotte, Spartanburg, Atlanta, Nashville, Newark, Boston.

BAHNSON
HUMIDIFIERS

All textile mills are being forced to check manufacturing costs more closely than ever before. An inadequate or obsolete humidifying system will prevent a mill from securing good production. The NEW BAHNSON SYSTEM is saving money for leading mills all over the world.

Write for Details

THE BAHNSON CO.
Winston-Salem, N. C.

MILL NEWS ITEMS

ALBEMARLE, N. C.—Directors of the Wiscassett and Efird Mills held their semi-annual meetings this week. Reports for the latter part of 1933 reflected much better business conditions, and an optimistic outlook for the future was reflected.

BURLINGTON, N. C.—Ten mills of the Burlington Mills group, J. Spencer Love, president, have recently completed WAK pick counter installations bought from WAK, Inc., Charlotte, N. C.

WADESBORO, N. C.—W. B. Rose was re-elected president and Charles M. Burns, secretary and treasurer, at the annual stockholders' meeting of the Wadesboro Cotton Mill, which was held this week. A successful year's business was reported. Directors were re-elected as follows: W. B. Rose, Charles M. Burns, Mrs. C. M. Burns, Sr., Miss Maggie Burns, D. E. Gatewood, J. A. Leak and L. G. Atkinson.

HICKORY, N. C.—Ernest E. Whisnant, president and treasurer of the Whisnant Hosiery Mill, and C. L. Whisnant, superintendent and secretary, have announced that the mill will be enlarged. An addition 40 feet wide and 60 feet long, two stories, will be constructed. Fifty new H-H automatic knitting machines have been purchased and will be installed upon the completion of the new addition. Twenty-four machines of the present equipment have been sold to W. E. Poovey of Granite Falls, so th eequipment of the plant will be increased only by 26 machines.

HIGH POINT, N. C.—High Point's big hosiery mill payroll was increased by 40 per cent as the 25 mills of the city joined the rest of the industry in going from a three-day curtailed schedule operation to a five-day week. Two shifts of eight hours each are being used here at the present time.

General satisfaction was expressed over the ending of the emergency curtailment and more than 5,000 workers will participate in the added payroll money.

Whether business which has been piled up on some of the plants can be maintained so that the full-time operation can be carried on indefinitely remains to be seen. Manufacturers are optimistic over the prospects.

BELMONT, N. C.—The annual meeting of the stockholders of the Linford Mills, Inc., was held at the mill office. The report of the secretary-treasurer made a good showing, in view of the general financial conditions throughout the country. Payment of a small dividend was authorized. Officers and directors were re-elected as follows: A. C. Lineberger, president; W. B. Puett, vice-president; J. E. Ford, secretary-treasurer. Additional directors include S. P. Stowe, I. J. Ford, C. W. Kale and C. L. Bumgardner.

Stockholders of the Perfection Spinning Company met in annual session at the mill offices. A good showing was made in the report and a small dividend was authorized to be paid. The officers and board of directors were re-elected as follows: A. C. Lineberger, president; R. B. Suggs, vice-president; D. P. Stowe, secretary-treasurer. Additional directors include R. L. Stowe, A. C. Lineberger, Jr., and E. D. Maynard.

MILL NEWS ITEMS

GRANITE FALLS, N. C.—W. E. Povey, president of Granite Falls Hosiery Mill, which burned December 15th, announces construction of modern new building to start in the next few days. Around 40 operatives will be employed. Building supplies and machinery equipment has been purchased.

LAURENS, S. C.—Stockholders at the annual meeting of the Stutz-Hadfield Silk Corporation elected a board of directors composed of C. W. Stone, A. J. Milling, John H. Young, W. J. Hadfield and Homer S. Finley. The first three represent the preferred stockholders and the latter two the holders of common stock.

At the directors' meeting which followed that of the stockholders, C. W. Stone was elected president of the firm. W. J. Hadfield was made vice-president and A. J. Milling was elected secretary and treasurer.

The corporation has two classes of stock outstanding—preferred stock to the amount of $60,000 owned principally by Clinton people, while the $50,000 of common stock is owned by H. S. Finley, W. J. Hadfield and Sol Stutz.

The corporation's preferred stock provides for a dividend of 7 per cent per annum, payable semi-annually. The by-laws and terms under which the preferred stock was issued specifies that when as many as four semi-annual dividends are in default, the preferred stockholders have exclusive voting power at all meetings of the stockholders and have the right to elect a majority of the members of the board of directors. A statement of the affairs of the corporation submitted at the annual meeting showed that more than four semi-annual dividends on the preferred stock was in arrears. This automatically gave to the preferred stockholders the right to elect a majority of the directors, which right was exercised.

A statement was made at the meeting by R. W. Wade, attorney, that a litigation was at that time pending in the courts in connection with the corporation. Mr. Wade stated that the action was commenced on the first day of January to a committee composed of C. W. Stone, A. J. Milling and John H. Young, representing the preferred stockholders. This action was started for the purpose of requiring an audit of the affairs of the corporation and to prevent any disposition of any of the assets of the corporation until the audit had been completed.

On January Circuit Judge C. C. Featherstone of Greenwood issued an order directing the officers of the corporation, who were W. J. Hadfield, president; Jack H. Young, vice-president; Homer S. Finley, secretary; Sol Stutz, treasurer, and H. D. Henry as a committee of the board of directors to produce all records of the corporation and restrain the officers from disposing of any property of the corporation pending the litigation. Subsequent to the order issued by Judge Featherstone on January 1st, a consent order was signed by him on January 9th, placing the affairs of the corporation in the hands of a committee composed of C. W. Stone, representing the preferred stockholders, and W. J. Hadfield, representing the common stockholders, with authority vested in the committee to operate the plant pending the litigation or until further orders of the court.

Attorney Wade explained that the action of the preferred stockholders in electing officers could not change the status of the court's orders. He stated further that

Profit by the Mistakes Of Others

Experience is the best teacher, but a hard one when obtained first hand. Therefore it is often quicker and more economical to get experience second hand.

In other words to arrive at the best processing methods through simple trial and error can be very costly. On the other hand equally good results can be obtained in a shorter time, if broader outside experience is called in to anticipate the outcome before new methods are adopted.

Arnold-Hoffman Consultation Service offers this broader outside experience,—an experience gained in more than a century of contact with all branches of the textile industry.

We have seen many costly mistakes made in sizing, printing and finishing operations. Why run the risk of repeating these mistakes in your plant? Let us help you to profit by them instead. Tell us your processing problems. No obligations.

Arnold, Hoffman & Co., Inc.

Established 1815. Plant at Dighton, Mass.
PROVIDENCE, R. I.

New York Boston
Philadelphia Charlotte

AH

CHEMICAL PRODUCTS
Sizing Gums and Compounds · Soluble Gums Softeners · Soluble Oils · Tallow · Waxes · Soaps Flour · Dextrines · Starches · Pigment Colors and Lakes · Ammonia · Acids · Blue Vitriol Borax · Bichromate of Soda · Bichromate of Potash · Liquid Chlorine · Chloride of Lime · Caustic Soda (solid or flaked).

MILL NEWS ITEMS

the last order issued on January 9th permitted operation of the plant through the committee, but restrained the officers and directors from disposing of any of the assets of the corporation during the litigation, and until an audit had been made. The committee, however, in their discretion, are permitted to sell any of the manufactured goods for the purpose of defraying the expenses of operation, but for no other purpose.

The mill is now running two shifts a day under the management of the committee appointed by the court.

Standardization of Weight of Cotton Tares Approved

The House Agricultural Committee has reported favorably a bill by Representative Fulmer (D., S. C.) to standardize the weight of cotton tares, or bagging, and expressed the opinion the legislation would result in the substitution of cotton wrapping for baled cotton in place of jute now generally used.

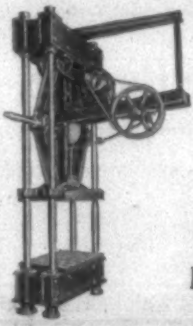
The bill would limit weight of the bale covering, including both bagging and ties, to a maximum of 15 pounds, and provide for use of net weights in interstate and foreign commerce transactions in cotton.

For Sale

450 Veeder day and night pick clocks, brand new.
200 Draper Loom Beams, 44" between heads, 18" head for Roper let-off.
250 Model "E" 40" Draper Looms, 2 harness.
135 Stafford 40" shuttle-change looms, 2 harness.
50 ½ H.P., 220 volt G. E. Loom Motors complete.

GEORGE D. FLYNN, JR.

29 Troy Street
Fall River, Mass.



BALING PRESS

Motor Drive, Silent Chain, Center of Screw.
Push Button Control — Reversing Switch with limit stops up and down.
Self contained. Set anywhere you can run a wire.
Our Catalogue sent on request will tell you more about them.

Dunning & Boschert Press Co., Inc.
328 West Water St., Syracuse, N. Y.

DARY TRAVELERS

If it's a DARY Ring Traveler, you can depend on it that the high quality is guaranteed—that the weight and circle is always correct, and that all are uniformly tempered which insures even running, spinning or twisting.

Ask for Prices

DARY RING TRAVELER COMPANY
311 Somerset Ave. Fred H. Dary, Mgr. Taunton, Mass.

JOHN E. HUMPHRIES
P. O. Box 843
Greenville, S. C.

Sou. Agents

CHAS. L. ASHLEY
P. O. Box 720
Atlanta, Ga.

Fulmer said this 15-pound limitation could not be met with heavy jute or burlap bagging and that cotton bagging would have to be substituted. Cotton bagging has been introduced to the trade within the past few years. Fulmer estimated 200,000 bales would be required annually to make enough wrapping to cover the American cotton crop.

The common practice now is to sell and buy cotton on gross weight without any special tare standards which, on the average 500-pound bale, run from 21 pounds at the gin to 30 pounds for export.

This is more wrapping than is necessary, the report said, and "operates as an unnecessary charge upon the industry and as an economic loss to the producer in the way of excessive freight, insurance, waste and various other charges."

"Or," the report continued, "in case the excessive or unnecessary covering or wrapping is not placed on the cotton, the producer loses the difference in the weight between the amount actually used and the usual tare reduced by the trade, which means eight to 12 pounds per bale."

New Yarn Developments To Be Shown Knitters

The latest improvements in knitting, sewing, finishing and packaging machines will be seen in operation at the Second National Knitwear Industrial Exposition in Grand Central Palace, February 12th to 16th.

More than forty machines, many of them to be shown here for the first time, will be among the exhibits. Needles, yarns, dye and accessories used in textile manufacture will complete the showing of the fifty concerns represented.

Machinery builders expert buyers from all sections of the country as a result of the textile code extension into 1935 which make necessary the purchase of machines to round out mill production facilities for eight-hour periods in place of continual operation of certain machines as formerly practiced.

This is the only industrial textile exposition scheduled to be held in New York during the year, according to A. B. Coffman, manager. The exposition last year drew an attendance of over 10,000. Already mill executives from fifteen States and six foreign countries have expressed their intention to attend, he said.

C. C. C. Buying Will Be Resumed Next Month

Philadelphia.—After a month of curtailed activity the local Army Quartermaster Depot will resume large scale buying for the Civilian Conservation Corps next month. On February 9th bids for manufacture from Government material of 22,245 blue denim jumpers and 74,040 denim trousers will be opened.

Mill Engineer Says Stretch-Out a Blessing When Properly Applied

(*Continued from Page* 12)

get as high production and efficiency with non-automatic looms as with automatic looms, the writer remembers personally within the last five or six years talking with a man who still clung to the idea that automatic looms were too expensive to run and a disgrace to the industry for quality cloth. This man is considered a curiosity today.

Things went well with the mills having automatic looms, as far as their competitive position was concerned, for several years. While the new looms could not alter the market price, yet the mills enjoying this advantage had a more favorable position than those that did not.

By 1920 a great majority of print cloth mills had installed automatic looms and the individual advantage to a mill having these looms was therefore negligible.

DEPRESSION STARTED IN 1924

By 1924 cotton mill business had become bad. The post-war boom had exhausted itself. So many new mills had been put up during and immediately after the war that the industry was too large. The supply exceeded the demand. The real depression, as far as cotton mills are concerned, started in 1924, and the mortality of cotton mills started to increase rather rapidly from that time.

When the supply exceeds the demand, prices go down. Mills on all fabrics found it necessary to reduce their costs. Some followed the line of least resistance by cutting wages. Others moved the location of their mills to where the cost for taxes, power, etc., was lower.

About this time and for a very few years previously, some men had started to study scientifically the manufacturing departments of cotton mills. It was soon found that the loom stoppage on various fabrics could be reduced very materially. It was found that by studying not only weave room conditions but conditions from the opening room up to the weave room that from one-half to four-fifths of the loom stoppage could be eliminated with its attendant unnecessary work. It was reasonable to expect that when a large percentage of the loom stoppage had been eliminated a weaver could run more looms.

STUDY MACHINE OPERATION

Very accurate measurements were made of the time that a weaver required for performing the different operations such as walking, piecing up ends, etc. It was felt also that a weaver, whose wages had increased considerably by that time, could better spend her time performing the more skilled part of her work, leaving the less skilled portions to lower paid help or learners. To be concrete, the mills on many classes of fabrics felt that a weaver should not fill batteries but should spend practically all her time piecing up ends, inspecting the cloth, etc., while battery hands, whose pay was lower, should fill the batteries. In other words a scientific study of machine conditions, machine operation, and the jobs in the mill had shown conclusively that a weaver could run many more automatic looms than formerly run, and with no more effort or fatigue.

The most progressive mills hired reputable engineers to survey completely conditions within the mills, measure the many variables, and lay out fair jobs for the weavers (and other operatives). The results of this work were that these mills made large savings in their manufacturing costs, their operatives received more money and did not do any more work. These results were universally satisfactory to everyone.

The writer does not know of a single instance in which a high class engineer laid out the work in a mill and where the mill has followed its recommendations where there was a strike or labor difficulties. The results were, as has just been said, universally satisfactory. It was a normal growth, both of machines and methods, and was decidedly a help to all concerned.

The success with which these progressive mills had reduced their costs brought its danger and corruption of practice. Mill men as a whole are wide awake and have pride in their work. A mill man, whose weavers are running twenty-four looms and sees his neighbors on the same fabrics operating sixty to eighty looms per weaver, is not satisfied. Many of these men say, "if my neighbor can do it, I can do it," or "what is the use of paying engineers to do this work; my overseers are just as smart as they are," and will go ahead and extend the number of looms per weaver, or sides per spinner without the slightest bit of preparation. Ordinarily, when the work is done scientifically, about a year of preparation is required to get a mill tuned up so that the loom stoppage is low enough to justify any considerable labor extension. Yet the writer has known of many instances where mills without an hour's preparation have decided to copy the figures used by another mill without regard to whether these figures apply to this mill or not, and has increased tremendously the number of looms his weavers shall run. The results of such operation are obviously unwise. In practically every instance it is impossible for a weaver to run the number of looms he is asked to operate. The result is that the weaver is immediately overworked, discouraged, and rebellious, and in the majority of cases a walk-out follows.

TERM "STRETCH-OUT" ABUSED

It was just such a proecdure on the part of a number of mills a few years ago that started a series of labor disturbances that made popular the vicious expression "stretch-out" system(in some cases justified), and which eventually led up to the section in the NRA code prohibiting an enlargement of the amount of work required from an operative.

Another very unfortunate practice that is closely akin to the practice of mills making an extension without ample preparation was the springing up of a large group of unreliable individuals and concerns whose background and training gave them no preparation for such work,

MODERNIZE YOUR CLOTH ROOM WITH HERMAS SHEARS—

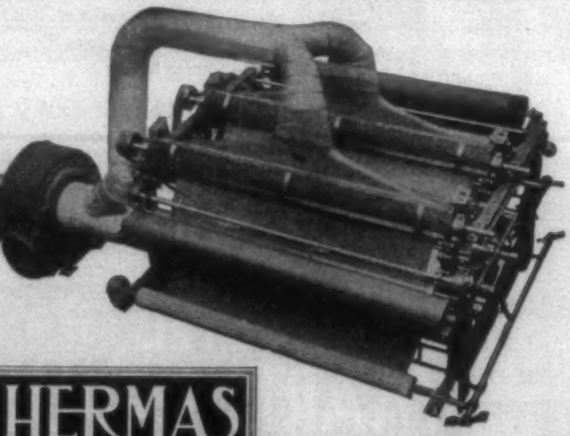
Fully Automatic

Over 3 times as many Hermas Shears are in operation in cotton, rayon, and silk mills as all other shears COMBINED—handling the production of more than 200,000 looms.
The reasons for this outstanding leadership are two.

1. The greater accuracy of machine picking as compared with hand operators, resulting in higher, more uniform production.
2. The unique mechanical advantages of Hermas machines, which put them in a class by themselves.

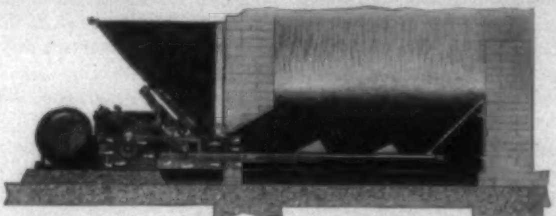
Write for complete details of these machines and facts as to how they are saving manufacturers $50 to $200 a week.

HERMAS MACHINE CO.
Cloth Room Machinery
Warburton Ave.
Susquehanna R. R.
Hawthorne, N. J.
Southern Representatives;
Carolina Specialty Co., Charlotte, N. C



HERMAS

"Save $.50 per ton of coal"—"Use only half as much coal"—"Do not have any more trouble with smoke and soot"



Such were the results when a Detroit LoStoker was installed in the Mimslyn Hotel, Luray, Va.

The statements quoted above are taken from a report of Mr. John W. Mims, manager of the Mimslyn (Hotel of Distinction). A copy of the complete report will be sent to anyone interested. This is typical of the performance not only of Detroit LoStokers but also of the largest Detroit Multiple Retort Stokers and all the intermediate sizes. There is a Detroit Stoker for virtually every load requirement and for burning a wide variety of fuels under all types of boilers. Write for Bulletin 142.

DETROIT STOKER COMPANY

Sales Offices and Engineering Department:
Third Floor, General Motors Building, Detroit, Michigan
Works at Monroe, Mich.—District Offices in Principal Cities
Atlanta Office: Wm. W. Moore, Dist. Mgr., 1018 Boulevard, N. E.

CONVENIENT TO EVERYTHING IN NEW YORK

Where the cream of American brains, money, beauty and talent are concentrated stands Hotel Martinique—close to everything in the world's most fascinating city.

Comfortable, luxurious rooms—courteous efficient service—and food to delight an epicure in the beautiful Louis XV Dining Room.

600 LARGE AIRY ROOMS
SINGLE WITH BATH FROM $2.50
DOUBLE WITH BATH FROM $3.50

Direction: AMERICAN HOTELS CORPORATION
J. LESLIE KINCAID, Pres.
GEO. H. WARTMAN, Mgr.

BROADWAY AT 32nd AND 33rd STREETS

HOTEL MARTINIQUE

and who claimed to make as much economy and saving as the more reliable concerns. Men who had never set foot in a cotton mill to work, tried to show fixers how to fix looms, grinders how to grind cards, etc., etc. Not quite as bad as this, men who had worked in mills and were good in one department, tried to give scientific advice in all departments.

NO MAXIMUM NEEDED

As a result of work done improperly and without preparation in some mills, there has been considerable talk of trying to set a standard maximum number of looms that a weaver can run. This is absolutely out of the question. The amount of work that a weaver has to do depends on the number of ends she has to piece up, the time required to piece up, the amount of walking time according to the number of looms, the time required to fill batteries which depends on the type of looms, the arrangement of the filling-in box and the time the filling lasts in the shuttle; cleaning time, and rest time.

Each of the above varies tremendously with different fabrics and even with the same fabrics in a given mill. To illustrate the differences, the following discussion has been written on the variables in the stops per loom per hour:

Stops per loom per hour (S. P. L. P. H.). This varies:

1. According to fabric. It is possible to establish a reasonable expectancy in loom stoppage for any given fabrics, assuming corrected machine conditions and operation. To do this each fabric must be studied individually. Our work has shown us fabrics with a range of from two to three S. P. L. P. H. assuming that the mill is tuned up as well as it is reasonable to expect. The cloth requirements govern this. Typical fabrics have one or more of the following:

Strength, elasticity, cleanliness, soft feel, soft for napping, hard twist, resistance to friction, smooth appearance, accuracy of pattern (plain, fancy, colored), no weaving imperfections, such as broken picks, thick places, or thin places, or bunches, fulness (hand), cheapest price, even yarn, heavy sley goods, heavy picks goods, balanced weave, coarse, fine or medium yarns.

All of the above control the S. P. L. P. H. that is possible to reach from the standpoint of cloth construction alone, and in gray goods. The colored question complicates the matter still further. In raw stock dyed fabrics, or chain or beam dyed fabrics, the dyeing (theoretically perfect) alters the yarn as far as weaving is concerned. One color will weave much better than another (loom ends). As an example, many black yarns will show an unusually high-end breakage in weaving. Some blues are very bad, while others will weave as well as gray stock.

2. According to individual mills.

A discussion of this is almost endless. We have seen two mills weaving the same fabric, where one mill will have five or six times the S. P. L. P. H. that the other one has. The most general classification of the causes of excessive stoppage are:

(a) Cotton, grade, staple, character, blending.
(b) Machine condition (whole mill).
(c) Machine operation(settings and adjustment—whole mill).
(d) Organization of draft, speed, and twist (carding and spinning).
(e) Type of machines (whole mill).

DEVELOPS STANDARD FORM

Amplyfling the above classifications, there are literally hundreds of machine details that affect the cloth either in quality or in ease of weaving. The standard forms that our company uses with headings to be inspected has between 1,000 and 1,100 items that should be reviewed to get a complete story of the mill. Each one of these items affects the quality of the yarn or cloth and the cost of manufacturing, or the labor arrangement that is possible. On each machine the physical condition and the setting of each individual part literally has its effect. Beside the physical elements of the machine, the settings, such as roll settings, lay, tension and loom settings have an influence that cannot be exaggerated. Tension on every single machine in the mill after the opening room affects the stoppage of the looms. Again the question of drafts is vitally important. A great many mills show an unnecessarily high loom stoppage because of too high or too short a draft in the carding and spinning. High speeds in the card room or the spinning room strain the yarn. For ordinary cloths each cotton has the twist that will give the yarn a maximum strength. With a slacker twist the yarn becomes weak and pulls apart. With much more twist the yarn becomes brittle and snaps. For instance, on print cloths made from one-inch cotton, a twist multiple of from 4.55 to 4.75 is considered good in the warp, and a twist multiple of from 3.75 to 3.90 is considered good in the filling. Much variation from these figures will cause difficulty in the weaving, yet we have seen in one mill a twist multiple of 5.25 on the filling for print cloth. This was put in in the effort to strengthen the filling, yet as a matter of fact it caused the weavers a great deal of unnecessary work.

One could go on at much length giving variations that we find from mill to mill. These variations are tremendous in mills that consider themselves to be well run.

In colored goods mills dyeing is a big factor. The quality of the dye used, the dye formulae, the washing, and the drying influence greatly the value of the cotton or yarn from the weaving standpoint. This is more true, possibly, in mills that have raw stock dyeing, but it is true to a large extent in mills that have other systems. We have in mind two mills in which we are working, using about the same cotton and both having cloths of a blue warp of about the same shade. In one mill the blue warp runs exactly as well as the gray goods. In the other mill it is almost impossible to weave or spin the blue warp. Furthermore, in colored mills one lot will vary a great deal from the next lot and it seems very hard to standardize the dyeing. Always in colored mills where the same constructions of cloth are woven in several different colors, some colors will run comparatively well and other very poorly. In a colored mill it is very hard to standardize loom stoppage.

GENERAL LIMITS IMPOSSIBLE

In one product mills it is comparatively easy to standardize end breakage or loom stoppage. In change mills it is impossible to have a separate hank roving for each number of yarn. Therefore, that mill generally takes the largest number and strikes a draft organization that is advantageous for that number, which at the same time is not as good for the other numbers. Thus we have two mills whose machines might be in equally good condition and whose operation might be equally good, both spinning 30s yarn from the same cotton, and we find the work running in one mill much better than in the other.

From the above it will be seen that it is absolutely impossible to set general limits of the number of looms that a weaver can run.

As has been said before, we have taken weavers as an illustration. The same thing applies to any other department in the mill.

In conclusion we would say that the only satisfactory method of establishing a machine task is to have a practical and scientific study made of the mill and have the jobs liad out on a reasonable basis.

Where mills have put in the stretch-out system after a scientific and practical study of the whole situation had been made, the stretch-out system was a blessing to the mills and to the operatives. In mills where it was put in with no preparation or with uninformed advisers, the results were very unsatisfactory to all parties concerned and caused the whole system to fall into ill repute.

CHEMICALS
Made by

Barium Reduction Corp.
Charleston, W. Va. SODIUM SULPHIDE
General Chemical Co.
New York ACETIC AND SULPHURIC ACIDS
Hercules Powder Co., Inc.
Wilmington, Del. PINE OIL
Heyden Chemical Corp.
New York FORMALDEHYDE
John D. Lewis, Inc.
Providence, R. I. TANNIC ACID
Mutual Chem. Co. of America
New York CHROME AND OXALIC ACID
Myles Salt Co., Ltd.
New Orleans "C" SALT
Philadelphia Quartz Co.
Philadelphia SILICATES OF SODA
The Procter & Gamble Dist. Co.
Cincinnati TEXTILE SOAPS
Solvay Sales Corporation
New York SODA ASH AND CAUSTIC SODA
Takamine Laboratory, Inc.
Clifton, N. J. POLYZIME "P"
Victor Chemical Works
Chicago FORMIC ACID
Virginia-Carolina Chem. Corp.
Richmond TRISODIUM PHOSPHATE

CHAS. H. STONE
Laboratory and Works *Office and Warehouse*
Wilkinson Blvd. and So. Ry. *Stone Bldg., Charlotte*
TELEPHONES—L. D. 942—LOCAL 6129-6120
THE CHEMICAL HOUSE OF THE SOUTH

ALL SOAPS
FOR TEXTILE MILLS
WRITE US FOR SAMPLES AND QUOTATIONS
ROME SOAP MFG. CO.
ROME, N. Y.
SOUTHERN OFFICE AND WAREHOUSE:
BOX 84, CHARLOTTE, N. C.

INDEX TO ADVERTISERS

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

Page

—A—
Abbott Machine Co. —
Adolff Bobbin Co. —
American Cyanamid & Chemical Corp. 2
Arnold, Hoffman & Co., Inc. 20
Ashworth Bros. —
Associated Business Papers, Inc. —
Atlanta Brush Co. —
—B—
Babbitt Bros. —
Bahnson Co. 21
Bailey Meter Co. —
Baily, Joshua L. & Co. 28
Barber-Colman Co. —
Barkley Machine Works —
Belger Co., The —
Borne, Scrymser Co. —
Brown, David Co. —
Butterworth, H. W. & Sons Co. —
—C—
Campbell, John & Co. —
Carolina Steel & Iron Co. —
Charlotte Chemical Laboratories, Inc. 29
Ciba Co., Inc. —
Clark Publishing Co. 35
Clinton Co. 35
Corn Products Refining Co. —
Curran & Barry 28
—D—
Dary Ring Traveler Co. 22
Deering, Milliken & Co., Inc. 28
Detroit Stoker Co. 24
Dillard Paper Co. 29
Dixon Lubricating Saddle Co. —
Draper Corporation 1
Dronsfield Bros. —
Dunning & Boschert Press Co. 22
DuPont de Nemours, E. I. & Co. —
Durant Mfg. Co. —
—E—
Eaton, Paul B. 26
Emmons Loom Harness Co. —
Enka, American —
—F—
Firth-Smith Co. 16
Fitch Dustdown Co., The 26
Flynn, Geo. D., Jr. 22
Foster Machine Co. —
Benjamin Franklin Hotel —
Franklin Process Co. 7
—G—
Garland Mfg. Co. —
Gastonia Brush Co. —
General Dyestuff Corp. —
General Electric Co. —
General Electric Vapor Lamp Co. —
Goodyear Tire & Rubber Co. —
Governor Clinton Hotel —
Grasselli Chemical Co., The 36
Graton & Knight Co. --
—H—
Hart Products Corp. —
H & B American Machine Co. —
Hermas Machine Co. 23
Houghton, E. F. & Co. —
Howard Bros. Mfg. Co. 16
Hunt, Rodney Machine Co. —
Hygrolit, Inc. —
I
Industrial Rayon Corp. —
—J—
Jacobs, E. H. Mfg. Co., Inc. —
Jacobs Graphic Arts Co. —

Page
Johnson, Chas. B. 21
—K—
Keever Starch Co. —
—L—
Lincoln Hotel —
Luttrell, C. E. & Co. —
—M—
McCord, H. M. —
Manhattaan Rubber Mfg. Div. of Raybestos Manhattan, Inc., The —
Martinique Hotel 24
Miami Biltmore Hotel —
—N—
National Oil Products Co. —
National Ring Traveler Co. 29
Neumann, R. & Co. —
N. Y. & N. J. Lubricant Co. —
Noone's, Joseph, Sons Co. 13
—O—
Onyx Oil & Chemical Co. —
—P—
Parks-Cramer Co. —
Peach, D. W. —
Perkins, B. F. & Son, Inc. 9
Philadelphia Belting Co. —
Powers Regulator Co. —
Precision Gear & Machine Co. —
—R—
Rhoades, J. E. & Sons —
Rice Dobby Chain Co. 35
Robinson, Wm. C. & Son Co. —
Rome Soap Mfg. Co. 25
Roney Plaza Hotel —
Roy, B. S. & Son —
—S—
Saco-Lowell Shops —
Schachner Leather & Belting Co. —
Seydel-Woolley Co. 29
Sherwin-Williams Co. 21
Sipp-Eastwood Corp. —
Soluol Corp. —
Sonoco Products —
Southern Ry. 34
Southern Spindle & Flyer Co. —
Stanley Works —
Steel Heddle Mfg. Co. —
Stein, Hall & Co. 17
Stevens,, J. P. & Co., Inc. 28
Stewart Iron Works Co. —
Stone, Chas. H. 25
—T—
Terrell Machine Co. —
Texas Co. —
Textile Finishing Machinery Co. 11
—U—
U. S. Bobbin & Shuttle Co. —
U. S. Ring Traveler Co. —
Union Storage & Warehouse Co. —
Universal Winding Co. —
—V—
Veedor-Root, Inc. —
Victor Ring Traveler Co. —
—W—
WAK, Inc. —
Waltham Watch Co. —
Washburn Printing Co. 32
Wellington, Sears Co. —
Whitin Machine Works —
Whitinsville Spinning Ring Co. 35
Wolf, Jacques & Co. —

Textile-Finishing Machinery Co., Providence, R. I. Sou. Rep., H. G. Mayer, Johnston Bldg., Charlotte, N. C.

Why
Continue To Use
a strong odored disinfectant to cover up another obnoxious smell any place about your mill, when

RENO

Our Odorless Disinfectant

will kill germs, render all places where foul odors originate absolutely odorless, and helps to keep porcelain stainless.

RENO is in powder form, easily mixed, economical and safe to use.

The Fitch Dustdown Co.
Charlotte, N. C.
Cincinnati, O.—Baltimore, Md.
Established 1904

Industrial Runs At Full Capacity

Industrial Rayon Corporation is operating its plants at both Cleveland and Covington at full capacity and is booked up for the first quarter of the year, according to the annual report of Hiram S. Rivitz, president of the firm, to stockholders.

"Customers' actual releases for shipment against their commitments, however, for the first two weeks in January indicate deliveries for only 75 per cent of the orders booked for the same period, a ratio that may extend a little further into the first quarter, possibly due to slightly overstocked conditions and a temporary lull in a few branches of the industry," Mr. Rivita stated.

Close Cotton Dress Factory

Forrest City, Ark.—Declaring that he cannot pay the minimum wage of $12 set by the National Recovery Administration, Ed Ash, owner, has reduced the force of the Maidwell Garment Company from 400 to 30 and will close the plant when orders now on file are filled. The plant, which makes cotton dresses to retail at $1, has operated several weeks under a temporary permission to pay a minimum of $9 per week to white employees and $6.16 to negro employees. Under the permanent code the wages of white and negro employees must be the same. Ash announced his decision after a business trip to Washington and New York.

Plan Marker at Lincolnton

Plans for the erection of a marker at the site of the first cotton mill ever put up in the South, near Lincolnton, N. C., have been announced. The mill was erected in 1813 on property known as McDaniel Springs and started the industry that was destined to furnish employment to a large percentage of population in several Southern States.

PATENTS
Trade-marks, Copyrights
A former member of the Examining Corps in the United States Patent Office.
PAUL B. EATON
Registered Patent Attorney
Offices: 1408-T Johnston Bldg.
Charlotte, N. C. Phone 7797
434 Munsey Building
Washington, D. C.
Also Winston-Salem, N. C.

U. S. Rayon Production and Consumption Broke All Records in 1933

Production and consumption of rayon yarn for the year 1933 broke all previous records, according to figures compiled by the Textile Organon, published by the Tubize Chatillon Corporation. Output last year aggregated 207,578,000 pounds, or 54 per cent., above the 1932 total of 134,814,000 pounds, and 45 per cent greater than the previous record year of 1931.

Consumption of rayon during 1933 kept pace with production, totalling only one-half million pounds less, or 206,773,000 pounds, as compared with 152,178,000 pounds in 1932. Year-end stocks showed but a smal increase over the total at the close of 1932, and amounted to less than a three-weeks' supply. As a result, adds the paper, "the industry continues to be in a most healthy state of balance between the production and distribution of its product."

All of the above totals are based upon actual figures received from approximately 90 per cent of the industry.

Classification of rayon production by process shows that 76.4 per cent of the 1933 output was produced by the viscose process, 17.3 per cent was acetate and 6.3 per cent all other processes.

There has been a tremendous shift in distribution of rayon from the knitting field and into weaving, states the Organon. "One of the most amazing shifts," it adds, "is the decline in the amount of viscose process rayon consumed by the hosiery industry. This point was brought out by the producers in the compensatory tax hearings in Washington last fal and the 1933 data now bears out the testimony given then on the basis of sample data. It will indeed be difficult for the government or the mercerized cotton industry to show any shift merceribed cotton to rayon in the hosiery industry on the basis of these assembled data."

The following table shows production, consumption, production plus the import balance, and the estimated change in domestic stocks at the close of the year, compared with the previous year (in thousands of pounds).

	Production	Consumption	Production Plus Net Imports	Change in Stocks	
1933	207,578	206,773	207,428	Inc.	655
1932	134,814	152,178	134,358	Dec.	17,725
1931	150,879	157,359	152,369	Dec.	4,990
1930	126,805	117,196	132,801	Inc.	15,605
1929	121,283	131,329	136,099	Inc.	4,770
1928	97,232	100,133	109,153	Inc.	9,020
1927	75,555	100,022	90,182	Dec.	9,840
1926	62,692	60,627	71,637	Inc.	11,010
1925	51,902	59,125	57,195	Dec.	1,930
1924	36,328	42,232	38,282	Dec.	3,950
1923	34,494	32,563	37,523	Inc.	4,960
1922	23,700	24,661	25,816	Inc.	1,155
1921	14,991	19,747	18,267	Dec.	1,480
1920	10,229	9,479	11,709	Inc.	2,230

General Electric Co. Shows Increase Of Orders

Schenectady, N. Y.—Orders received by the General Electric Company during the year 1933 amounted to $142,770,791, compared with $121,725,772 for 1932, an increase of 17 per cent, President Gerard Swope announced.

Orders for the quarter ended December 31st amounted to $37,895,790, compared with $27,351,658 for the last quarter of 1932, an increase of 39 per cent.

Sales billed and earnings for the year of 1933 are not yet available; the complete annual report will be issued in March.

Third Edition
of
PRACTICAL
LOOM FIXING
By Thomas Nelson
Dean of Textile School, N. C. State College

Completely Revised to Cover Most Modern Equipment, With Chapters Devoted to the

WEAVING OF RAYON and RAYON LOOMS

This book, written by a recognized authority, is accepted throughout the textile industry as the standard work on this important subject. Previous editions have been used for many years as text books in schools and colleges, and sales to mill men both here and abroad, have been most gratifying.

PRICE: $1.25

Clark Publishing Co.
CHARLOTTE, N. C.

Have You Some Equipment You Want to Dispose Of?

SELL IT
Through A
Classified Ad
In The
Textile Bulletin
Read in Nearly All Textile Mills in the South

SELLING AGENTS *for* SOUTHERN COTTON GOODS

Deering, Milliken & Co.
Incorporated
79-83 Leonard Street
New York
99 Chauncey St., Boston **223 Jackson Blvd., Chicago**

CURRAN & BARRY
320 Broadway
New York, N. Y.

DOMESTIC EXPORT
MERCHANDISING
JOSHUA L. BAILY & CO.
10-12 THOMAS ST. NEW YORK

BULLETIN
Classified Ads
Bring Results at Low Cost
Make Your Wants Known Through This Medium

COTTON GOODS

New York.—Cotton goods business continued active last week. Sales of gray goods were very large for the first few days and were again active at the week end after a lull on Thursday. Prices were very strong, with advances named on some constructions.

There was a gratifying increase in the sales of finished goods and further good business is expected. Colored goods were active.

The volume done in print cloths and carded broadcloths was again large for the week. Sales of goods for work clothes showed a very healthy increase. Business in fine goods continued to show improvement.

The standard wide print cloths were sold in good aggregate quantities during the week. A noticeable resistance to sales for very late shipments developed, and in some instances buyers paid premiums, as in the case of 39-inch 4.75-yard 68x72s on which 8c was paid for April delivery.

Sheetings were much more active during the week, and prices of virtually all constructions moved forward. Advances were paid for lots off from one to three carloads and frequent sales of this size were made. Support came from converters, jobbers and the bag trade, and there also was some fair business from industrial users.

Sales of very good quantities of fancy goods on long-term contracts, and movement of good amounts of standard fine goods constructions were noted during the week. Prices of some style were advanced, and others, after momentary weakness, recovered and closed the week steady. The fancy goods business included a very wide variety of weave types which were taken on reorder on the strength of sharply increased wash goods business. Whereas until recently there had been a tendency almost to ignore the higher priced lines and confine attention to goods under 18c a yard, there was some fair interest last week in the better qualities, and total movement of such goods was the best in weeks.

Print cloths, 28-in., 64x60s	4¾
Print cloths, 27-in., 64x60s	4⅝
Gray goods, 38½-in., 64x60s	6⅞
Gray goods, 39-in., 80x80s	9½
Gray goods, 39-in., 68x72s	7¾
Brown sheetings, 3-yard	9
Brown sheetings, 4-yard, 56x60s	8¼
Brown sheetings, standard	9½
Tickings, 8-ounce	18
Denims	15½
Dress ginghams	15
Staple ginghams	9
Standard prints	7

J. P. STEVENS & CO., INC.
Selling Agents
40-46 LEONARD ST., NEW YORK

YARN MARKET

Philadelphia, Pa.—The yarn market continued to be spotty last week. In some instances spinners reported good orders, while others found the demand very slow. Prices continued on about the same basis although the advance which had been under way here for some weeks seemed checked for the presnt at least. High prices for cotton are not being fully reflected in yarn prices, spinners state.

The decision of the government to hold up buying of knitted goods on which bids had been submitted and options taken on yarns caused disappointment in the market and relief agency purchases had been expected to be a factor in the market.

There was a good deal of irregularity in prices. Some sources were quoting unchanged prices, with others a trifle higher.

Since production of combed sales yarn has been restricted to a maximum 56 hours a week ,spinners have been busy marking their prices up, by around one cent as a start. Effort in this respect is said to have had only a slight reward, buyers apparently preferring to wait for goods orders.

Demand for yarns is said to indicate either that manufacturers acquired fair weights of yarn while prices were unsteady on lower levels or that they have been disappointed in the amount of business to be had, at even attractive figures.

Quotations on mercerized yarns continue in a rather wide range, 72 cents being the minimum asking price of some for 60s-2, while others name 75 as their outside figures. Business is said to have been written at even less than 72 cents in instances, but such sales were effected under circumstances giving them no significance in relation to the market, which is described as firmer.

With both carded and combed yarn production being limited, it is felt that after curtailment has been under way for a longer period that the market will feel the strengthening effect of reduced production.

Southern Single Warps

10s	27 -__
12s	27½-__
14s	28 -__
16s	28½-__
20s	30 -__
26s	34 -__
30s	36 -__

Southern Two-Ply Chain Warps

8s	27 -__
10s	27½-__
12s	28 -__
16s	29½-__
20s	31 -__
24s	32 -__
26s	34 -__
30s	37 -__
30s ex.	38 -__

Southern Single Skeins

8s	26½-__
10s	27 -__
12s	27½-__
14s	28 -__
16s	28½-__
20s	30 -__
26s	34 -__
30s	36 -__
36s	40½-__
40s	43½-__

Southern Two-Ply Skeins

8s	27 -__
10s	27½-__
12s	28 -__
14s	28½-__
16s	29½-__
20s	31 -__
24s	33 -__
26s	34 -__
30s	37 -__
40s	44 -__
40s ex.	45 -__
50s	50 -__
50s	50 -__

Duck Yarns, 3, 4 and 5-Ply

8s	27 -__
10s	28 -__
12s	29 -__
16s	30 -__
20s	31 -__

Carpet Yarns

Tinged carpets, 8s, 3 and 4-ply	23 -__
Colored stripes, 8s, 3 and 4-ply	27 -__
White carpets, 8s,) and 4-ply	27 -__

Part Waste Insulating Yarns

8s, 1-ply	22 -__
8s, 2, 3 and 4-ply	23 -__
10s, 2, 3 and 4-ply	24 -__
12s, 2-ply	25 -__
16s, 2-ply	27 -__
20s, 2-ply	28½-__
30s, 2-ply	35 -__
36s, 2-ply	39 -__

Southern Frame Cones

8s	26½-__
10s	27 -__
12s	27½-__
14s	27½-__
14s	28 -__
16s	28½-__
18s	28½-__
18s	29½-__
20s	30 -31
22s	31½-__
24s	32½-__
26s	33½-__
28s	34½-__
30s	36½-__

WENTWORTH
Double Duty Travelers
Last Longer, Make Stronger Yarn, Run Clear, Preserves the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.
NATIONAL RING TRAVELER CO. PROV. R. I. U. S. A.
Manufactured only by the
National Ring Traveler Co.
Providence, R. I.
31 W. First Street, Charlotte, N. C.
Reg. U. S. P. O.

IF IT'S PAPER
Send Us Your Order
Cloth Winding Boards
Jacquard Board—Beaming Paper
Toilet Tissues
Twines—Wrapping Paper—Boxes, etc.
DILLARD PAPER CO.
GREENSBORO, N. C.

HUMIDIFIER TREATMENT
FOR
INDUSTRIAL PLANTS
WATER AND METAL TREATMENT
FOR
REMOVAL AND PREVENTION OF SCALE IN BOILERS
FILTER GRAVEL
Charlotte Chemical Laboratories, Inc.
Office—Laboratories—Plant—Warehouse
1122 SOUTH BOULEVARD
CHARLOTTE, N. C.

SEYCO
Seydel-Woolley Company
ATLANTA
Textile Chemicals
For
Best Weaving
A Concern is Known by the Customers It Keeps

SOUTHERN SOURCES OF SUPPLY

for Equipment, Parts, Materials, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in the TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts of materials, and believe this guide will prove of real value to our subscribers.

Adolff Bobbin Co., Kearny, N. J. Sou. Reps., J. Alfred Lechler, 2107 E. 7th St., Charlotte, N. C.; L. S. Ligon, Greenville, S. C.

American Cyanamid & Chemical Corp., 535 Fifth Ave., New York City. Sou. Office and Warehouse, 301 E. 7th St., Charlotte, N. C., Paul Haddock, Sou. Mgr.

American Enka Corp., 271 Church St., New York City. Sou. Rep., R. J. Mebane, Asheville, N. C.

Arnold, Hoffman & Co., Inc., Providence, R. I. Sou. Office, Independence Bldg., Charlotte, N. C. Sou. Mgr., Frank W. Johnson, Charlotte, N. C. Sou. Reps., Harold T. Buck, 511 Pershing Point Apts., Atlanta, Ga.; R. A. Singleton, R. 5, Box 128, Dallas, Tex.; R. E. Buck, Jr., 216 Tindel Ave., Greenville, S. C.

Ashworth Bros., Inc., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S. W., Atlanta, Ga.; Texas Rep., Textile Supply Co., Dallas, Tex.

Atlanta Brush Co., Atlanta, Ga. T. C. Perkins, Pres. and Treas.; Howard R. Cook, Vice-Pres.; M. D. Tinney, Sec.; Geo. B. Snow, Rep. Carolinas and Virginia; William C. Perkins, Rep. Georgia and Alabama.

Barber-Colman Co., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

Borne, Scrymser Co., 17 Battery Place, New York City. Sou. Reps., H. L. Siever, P. O. Box 240, Charlotte, N. C.; W. B. Uhler, 608 Palmetto St., Spartanburg, S. C.; R. D. Smith, 104 Clayton St., Macon, Ga.

Brown Co., David, Lawrence, Mass. Sou. Reps., Ralph Gossett, Woodside Bldg., Greenville, S. C.; William J. Moore, Woodside Bldg., Greenville, S. C.; Belton C. Plowden, Griffin, Ga.; Gastonia Mill Supply Co., Gastonia, N. C.; Russell A. Singleton, Dallas, Tex.; S. Frank Jones, 2300 Westfield Rd., Charlotte, N. C.; J. Richards Plowden, 421 10th Ave. West, Birmingham, Ala.

Butterworth & Sons Co., H. W., Philadelphia, Pa. Sou. Office, Johnston Bldg., Charlotte, N. C., J. Hill Zahn, Mgr.

Campbell & Co., John, 75 Hudson St., New York City. Sou. Reps., M. L. Kirby, P. O. Box 432, West Point, Ga.; Mike A. Stough, P. O. Box 701, Charlotte, N. C.; A. Max Browning, Hillsboro, N. C.

Carolina Steel & Iron Co., Greensboro, N. C.

Charlotte Chemical Laboratories, Inc., Charlotte, N. C.

Ciba Co., Inc., Greenwich and Morton St., New York City. Sou. Offices, 519 E. Washington St., Greensboro, N. C.; Greenville, S. C.

Clinton Co., Clinton, Iowa. Sou. Headquarters, Clinton Sales Co., Inc., Greenville, S. C., Byrd Miller, Sou. Agt. Sou. Reps., Luther Knowles, Sr., Hotel Charlotte, Charlotte, N. C.; Luther Knowles, Jr., 223 Springs St., S. W., P. O. Box 466, Atlanta, Ga. Stocks carried at convenient points.

Corn Products Refining Co., 17 Battery Place, New York City. Sou. Office, Corn Products Sales Co., Greenville, S. C. Stocks carried at convenient points.

Crompton & Knowles Loom Works, Worcester, Mass. Sou. Office, 301 S. Cedar St., Charlotte, N. C. S. B. Alexander, Mgr.

Dary Ring Traveler Co., Taunton, Mass. Sou. Rep., John E. Humphries, P. O. Box 843, Greenville, S. C.; Chas. L. Ashley, P. O. Box 720, Atlanta, Ga.

Detroit Stoker Co., Detroit, Mich. Sou. Dist. Rep., Wm. W. Moore, 180 Westminster Drive, N. E., Atlanta, Ga.

Dillard Paper Co., Greensboro, N. C. Sou. Reps., E. B. Spencer, Box 1281, Charlotte, N. C.; R. B. Embree, Lynchburg, Va.

Draper Corporation, Hopedale, Mass. Sou. Rep., E. N. Darrin, Vice-Pres.; Sou. Offices and Warehouses, 242 Forsyth St., S. W., Atlanta, Ga., W. M. Mitchell; Spartanburg, S. C., Clare H. Draper, Jr.

E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. John L. Dabbs, Mgr.; D. C. Newman, Asst. Mgr. Sou. Warehouses, 302 W. First St., Charlotte, N. C. Reps., L. E. Green, H. B. Constable, Charlotte Office; J. D. Sandridge, W. M. Hunt, 1031 Jefferson Standard Bldg., Greensboro, N. C.; B. R. Dabbs, 715 Provident Bldg., Chattanooga, Tenn.; W. R. Ivey, 202 E. Prentiss Ave., Greenville, S. C.; J. M. Howard, 135 S. Spring St., Concord, N. C.; W. F. Crayton, Dimon Court Apts., Columbus, Ga.; J. A. Franklin, Augusta, Ga.; Tom Taylor, Newnan, Ga.

Durant Mfg. Co., 1923 N. Buffum St., Milwaukee, Wis. Sales Reps., A. C. Andrews, 1615 Bryan St., Dallas, Tex.; J. B. Barton, Jr., 418 Mortgage Guarantee Bldg., Atlanta, Ga.; J. J. Taylor, 339 Bloom St., Baltimore, Md.; H. N. Montgomery, 408 23rd St. N., Birmingham, Ala.; L. E. Kinney, 314 Pan American Bldg., New Orleans, La.

Eaton, Paul B., 218 Johnston Bldg., Charlotte, N. C.

Emmons Loom Harness Co., Lawrence, Mass. Sou. Rep., George F. Bahan, P. O. Box 581, Charlotte, N. C.

Esterline-Angus Co., Indianapolis, Ind. Sou. Reps., Ga., Fla., Ala.—Walter V. Gearhart Co., 301 Volunteer Bldg., Atlanta, Ga.; N. C., S. C., Va.—E. H. Gilliam, 1000 W. Morehead St., Charlotte, N. C.

Firth-Smith Co., 161 Devonshire St., Boston, Mass. Sou. Rep., Wm. B. Walker, Jalong, N. C.

Gastonia Brush Co., Gastonia, N. C. C. E. Honeycutt, Mgr.

General Dyestuff Corp., 230 Fifth Ave., New York City. Sou. Office and Warehouse, 1101 S. Blvd., Charlotte, N. C., B. A. Stigen, Mgr.

General Electric Co., Schenectady, N. Y. Sou. Sales Offices and Warehouses, Atlanta, Ga., E. H. Ginn, Dist. Mgr.; Charleston, W. Va., W. L. Alston, Mgr.; Charlotte, N. C., E. P. Coles, Mgr.; Dallas, Tex., L. T. Blaisdell, Dist. Mgr.; Houston, Tex., E. M. Wise, W. O'Hara, Mgrs.; Oklahoma City, Okla., F. D. Hathway, B. F. Dunlap, Mgrs. Sou. Sales Offices, Birmingham, Ala., R. T. Brooke, Mgr.; Chattanooga, Tenn., W. O. McKinney, Mgr.; Ft. Worth, Tex., A. H. Keen, Mgr.; Knoxville, Tenn., A. B. Cox, Mgr.; Louisville, Ky., E .B. Myrick, Mgr.; Memphis, Tenn., G. O. McFarlane, Mgr.; Nashville, Tenn., J. H. Barksdale, Mgr.; New Orleans, La., B. Willard, Mgr.; Richmond, Va., J. W. Hicklin, Mgr.; San Antonio, Tex., I. A. Uhr, Mgr.; Sou. Service Shops, Atlanta, Ga.; W. J. Selbert, Mgr.; Dallas, Tex., W. F. Kaston, Mgr.; Houston, Tex., F. C. Bunker, Mgr.

General Electric Vapor Lamp Co., Hoboken, N. J. Sou. Reps., Frank E. Keener, 187 Spring St., N. W., Atlanta, Ga.; C. N. Knapp, Commercial Bank Bldg., Charlotte, N. C.

Goodyear Tire & Rubber Co., Inc., The, Akron, O. Sou. Reps., W. C. Killick, 205-207 E. 7th St., Charlotte, N. C.; P. B. Eckels, 141 N. Myrtle Ave., Jacksonville, Fla.; Boyd Arthur, 713-715 Linden Ave., Memphis, Tenn.; T. F. Stringer, 500-6 N. Carrollton Ave., New Orleans, La.; E. M. Champion, 709-11 Spring St., Shreveport, La.; Paul Stevens, 1609-11 First Ave., N. Birmingham, Ala.; B. S. Parker, Jr., Cor. W. Jackson and Oak Sts., Knoxville, Tenn.; E. W. Sanders, 209 E. Broadway, Louisville, Ky.; H. R. Zierach, 1225-31 W. Broad St., Richmond, Va.; J. C. Pye, 191-199 Marietta St., Atlanta, Ga.

Hart Products Corp., 1440 Broadway, New York City. Sou. Reps., Samuel Lehrer, Box 265, Spartanburg, S. C.; W. G. Shull, Box 923, Greenville, S. C.; O. T. Daniel, Textile Supply Co., 30 N. Market St., Dallas, Tex.

H & B American Machine Co., Pawtucket, R. I. Sou. Office, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga., J. C. Martin, Agt. Rockingham, N. C., Fred Dickinson.

Hermas Machine Co., Hawthorne, N. J. Sou. Rep., Carolina Specialty Co., P. O. Box 520, Charlotte, N. C.

Houghton & Co., E. F., 240 W. Somerset St., Philadelphia, Pa. Sou. Sales Mgr., H. J. Waldron, 514 First National Bank Bldg., Charlotte, N. C. Sou. Reps., J. A. Brittain, 722 S. 27th Place, Birmingham, Ala.; Porter H. Brown, P. O. Box 656, Chattanooga, Tenn.; G. F. Davis, 418 N. Third St., St. Louis, Mo., for New Orleans, La.; J. M. Keith, P. O. Box 663, Greensboro, N. C.; R. J. Maxwell, 525 Rhodes Haverty Bldg., Atlanta, Ga.; D. O. Wylie, 514 First National Bank Bldg., Charlotte, N. C.

Howard Bros. Mfg. Co., Worcester, Mass. Sou. Office and Plant, 244 Forsyth St., S. W., Atlanta, Ga. Guy L. Celchor, Mgr. Sou. Reps., E. M. Terryberry, 208 Embassy Apts., 1613 Harvard St., Washington, D. C.; Guy L. Melchor, Jr., Atlanta Office.

Hygrolit, Inc., Kearny, N. J. Sou. Reps., J. Alfred Lechler, 2107 E. 7th St., Charlotte, N. C.; Belton C. Plowden, Griffin, Ga.; L. S. Ligon, Greenville, S. C.

Jacobs Mfg. Co., E. H., Danielson, Conn. Sou. Rep., W. Irving Bullard, Treas., Charlotte, N. C. Mgr. Sou. Service Dept., S. B. Henderson, Greer, S. C.; Sou. Distributors, Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., and Charlotte Supply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Shelby Supply Co., Shelby, N. C.; Montgomery & Crawford, Spartanburg, S. C.; Industrial Supply Co., Clinton, S. C.; Carolina Supply Co., Greenville, S. C.; Southern Belting Co., Atlanta, Ga.; Greenville Textile Mill Supply Co., Greenville, S. C., and Atlanta, Ga.; Young & Vann Supply Co., Birmingham, Ala.; Waters-Garland Co., Louisville, Ky.

Johnson, Chas. B., Paterson, N. J. Sou. Rep., Carolina Specialty Co., Charlotte, N. C.

Keever Starch Co., Columbus, O. Sou. Office, 1200 Woodside Bldg., Greenville, S. C., Daniel H. Wallace, Sou. Agt. Sou. Warehouses, Greenville, S. C., Charlotte, N. C., Burlington, N. C. Sou. Rep., Claude B. Iler, P. O. Box 1383, Greenville, S. C.; Luke J. Castile, 515 N. Church St., Charlotte, N. C.; F. M. Wallace, 2027 Morris Ave., Birmingham, Ala.

Manhattan Rubber Mfg. Div. of Raybestos-Manhattan, Inc., Passaic, N. J. Sou. Offices and Reps., The Manhattan Rubber Mfg. Div., 1108 N. Fifth Ave., Birmingham, Ala.; Alabama—Anniston, Anniston Hdw. Co.; Birmingham, Crandall Eng. Co. (Special Agent); Birmingham, Long-Lewis Hdw. Co.; Gadsden, Gadsden Hdw. Co.; Huntsville, Noojin Hdw. & Supply Co.; Tuscaloosa, Allen & Jemison Co.; Montgomery, Teague Hdw. Co. Florida—Jacksonville, The Cameron & Barkley Co.; Miami, The Cameron & Barkley Co.; Tampa, The Cameron & Barkley Co. Georgia—Atlanta, Amer. Machinery Co.; Columbus, A. H. Watson (Special Agent); Macon, Bibb Supply Co.; Savannah, D. DeTreville (Special Agent). Kentucky—Ashland, Ben Williamson & Co.; Harlan, Kentucky Mine Supply Co.; Louisville, Graft-Pelle Co. North Carolina—Charlotte, Matthews-Morse Sales Co., Charlotte Supply Co.; Fayetteville, Huske Hardware House; Gastonia, Gastonia Belting Co.; Goldsboro, Dewey Bros.; High Point, Beeson Hdw. Co.; Lenoir, Bernhardt-Seagle Co.; Wilmington, Wilmington Iron Works; Winston-Salem, Kester Machinery Co. South Carolina—Anderson, Sullivan Hdw. Co.; Charleston, The Cameron & Barkley Co.; Clinton, Industrial Supply Co.; Columbia, Columbia Supply Co.; Greenville, Sullivan Hdw. Co.; Sumter, Sumter Machinery Co.; Spartanburg, Montgomery & Crawford. Tennessee—Chattanooga, Chattanooga Belting & Supply Co.; Johnson City, Summers Hdw. Co.; Knoxville, W. J. Savage Co.; Nashville, Buford Bros., Inc. Service Rep., J. P. Carter, 62 North Main St., Greer, S. C. (Phone 186). Salesmen, E. H. Olney, 101 Gertrude St., Alta Vista Apts., Knoxville, Tenn.; C. P. Shook, Jr., 1031 North 30th St., Birmingham, Ala.; B. C. Nabers, 2519 27th Place S., Birmingham, Ala.

National Oil Products Co., Harrison, N. J. Sou. Reps., R. B. MacIntyre, Charlotte, N. C.; G. H. Small, 310 Sixth St., N. E., Atlanta, Ga. Warehouse, Chattanooga, Tenn.

National Ring Traveler Co., 257 W. Exchange St., Providence, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Sou. Agt., C. D. Taylor, Gaffney, S. C. Sou. Reps., L. E. Taylor, Box 272, Atlanta, Ga.; Otto Pratt, Gaffney, S. C.; H. B. Askew, Box 272, Atlanta, Ga.

Neumann & Co., R., Hoboken, N. J. Direct Factory Rep., Pearse Slaughter Belting Co., Greenville, S. C.

N. Y. & N. J. Lubricant Co., 292 Madison Ave., New York City. Sou. Office, 601 Kingston Ave., Charlotte, N. C., Lewis W. Thomason, Sou. Dist. Mgr. Sou. Warehouses, Charlotte, N. C., Spartanburg, S. C., New Orleans, La., Atlanta, Ga., Greenville, S. C.

Onyx Oil & Chemical Co., Jersey City, N. J. Sou. Rep., Edwin W. Klumph, 1716 Garden Terrace, Charlotte, N. C.

Perkins & Son, Inc., B. F., Holyoke, Mass.

Philadelphia Belting Co., High Point, N. C., E. J. Payne, Mgr.

Rhoads & Sons, J. E., 35 N. Sixth St., Philadelphia, Pa. Factory and Tannery, Wilmington, Del.; Atlanta Store, C. R. Mitchell, Mgr.

Robinson & Son Co., Wm. C., Dock and Caroline Sts., Baltimore, Md. Sou. Office, Charlotte, N. C., B. D. Heath, Mgr. Reps., Ben F. Houston, Charlotte, N. C.; Fred W. Smith, Charlotte, N. C.; C. M. Greene, 1101 W. Market St., Greensboro, N. C.; H. J. Gregory, Charlotte, N. C.

Saco-Lowell Shops, 147 Milk St., Boston, Mass. Sou. Office and Repair Depot, Charlotte, N. C., Walter W. Gayle, Sou. Agent; Branch Sou. Offices, Atlanta, Ga., John L. Graves, Mgr.; Greenville, S. C.

Seydel-Woolley Co., 748 Rice St. N. W., Atlanta, a.

Sipp-Eastwood Corp., Paterson, N. J. Sou. Rep., Carolina Specialty Co., Charlotte, N. C.

Soluol Corp., 123 Georgia Ave., Providence, R. I. Sou. Rep., Eugene J. Adams, Terrace Apts., Anderson, S. C.

Sonoco Products Co., Hartsville, S. C.

Southern Spindle & Flyer Co., Charlotte, N. C.

Stanley Works, The, New Britain, Conn. Sou. Office and Warehouse, 552 Murphy Ave., S. W., Atlanta, Ga., H. C. Jones, Mgr.; Sou. Rep., Horace E. Black, P. O. Box 424, Charlotte, N. C.

Steel Heddle Mfg. Co., 2100 W. Allegheney Ave., Philadelphia, Pa. Sou. Office and Plant, 621 E. McBee Ave., Greenville, S. C., H. E. Littlejohn, Mgr. Sou. Reps., W. O. Jones and C. W. Cain, Greenville office.

Stein, Hall & Co., Inc., 285 Madison Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C., Ira L. Griffin, Mgr.

Stewart Iron Works, Cincinnati, O. Sales Reps., Jasper C. Hutto, 111 Latta Arcade, Charlotte, N. C.; Peterson-Stewart Fence Construction Co., 241 Liberty St., Spartanburg, S. C.

Stone, Chas. H., Stone Bldg., Charlotte, N. C.

Terrell Machine Co., Charlotte, N. C., E. A. Terrell, Pres. and Mgr.

U. S .Bobbin & Shuttle Co., Manchester, N. H. Sou. Plants, Monticello, Ga. (Jordan Div.); Greenville, S. C.; Johnson City, Tenn. Sou. Reps., L. K. Jordan, Sales Mgr., Monticello, Ga.

Universal Winding Co., Providence, R. I. Sou. Offices, Charlotte, N. C., Atlanta, Ga.

U. S. Ring Traveler Co., 159 Aborn St., Providence, R. I. Sou. Reps., William W. Vaughan, P. O. Box 792, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.

Veeder-Root Co., Inc., Hartford, Conn. Sou. Office, Room 1401 Woodside Bldg., Greenville, S. C., Edwin Howard, Sou. Sales Mgr.

Victor Ring Traveler Co., Providence, R. I., with Southern office and stock room at 137 S. Marietta St., Gastonia, N. C., also stock room at 520 Angier Ave., N. E., Atlanta, Ga., with B. F. Barnes, Jr., Mgr. Southern Salesmen, N. H. Thomas, Gastonia, N. C.; J. McD. McLeod, 80 Church St., Bishopville, S. C.; B. F. Barnes, Jr., Atlanta, Ga.; R. H. Mason, Gastonia, N. C.

Viscose Co., Johnston Bldg., Charlotte, N. C., Harry L. Dalton, Mgr.

WAK, Inc., Charlotte, N. C. W. A. Kennedy, Pres.; F. W. Warrington, field manager.

Whitin Machine Works, Whitinsville, Mass. Sou. Offices, Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reps., M. P. Thomas, Charlotte Office; I. D. Wingo and M. J. Bentley, Atlanta Office.

Whitinsville Spinning Ring Co., Whitinsville, Mass. Sou. Rep., Webb Durham, 2029 E. Fifth St., Charlotte, N. C.

Wolf, Jacques & Co., Passaic, N. J. Sou. Reps., C. R. Bruning, 1202 W. Market St., Greensboro, N. C.; Walter A. Wood Supply Co., 4517 Rossville Blvd., Chattanooga, Tenn.

Cotton Textile Code Modification Approved

Modification of the cotton textile code to prescribe labor conditions for "outside" and partially incapacitated employees has been approved by National Recovery Administrator Hugh S. Johnson.

Under the modification minimum wages of not less than 75 per cent of the standard minimum fixed in the code are to be paid to outside employees and cleaners who may not work in excess of 44 hours a week except in emergencies. The modification also requires the payment of not less than 80 per cent of the standard to partially incapacitated employees and provides that the latter class may not exceed 4 per cent of the total number of workers in a mill.

$8,500,000 Taxes Paid By Mills in Mass.

Boston.—In a statement issued by the Internal Revenue Department, the amount of processing taxes from 110 cotton mills in the State of Massachusetts for the period August 1-December 15, totalled $8,500,000. This does not include the floor tax, which, according to estimates, accounted for nearly $2,500,000.

Dr. Hamrick Explains View Against Anti-Stretch-Out

Columbia, S. C.—With reference to his opposition to the anti-stretch-out bill, Dr. W. C. Hamrick, State Senator from Cherokee County, said that he recognized the measure was impracticable and would prove unfair to the very people it was supposed to help. Dr. Hamrick said that this judgment has been verified by the findings of State and Federal authorities after exhaustive studies.

In discussing his retirement from the Senate after serving for eight years, Dr. Hamrick said that his health has been splendid in recent months and this factor had no effect in bringing about his decision not to offer for re-election.

Dr. Hamrick is very popular in the Senate. The fact that he will not offer for re-election was received here with much regret.

Committee To Study Southern Cotton Deliveries

Washington. — Appointment of a special committee to study the effect of Southern deliveries against futures contracts, and proposals to limit the holdings that individuals may control on the cotton exchanges, was agreed upon by representatives of exchanges, merchants and shippers, at an informal conference with Chairman Smith, of South Carolina, of the Senate Agricultural Committee.

The committee will be composed of five members from the various divisions of the cotton industry, favoring the continuance of the present practice of Southern deliveries, and five against. After the membership had been selected, they are to meet, hear arguments for and against the policies and report back to Chairman Smith, who hopes to secure legislative action on their conclusions this session.

A decision on this form of committee was arrived at by those attending the conference after a motion to have the study made by an agency of the government sponsored by William Clayton, of Anderson, Clayton & Co., had been rejected by a vote of eight to seven. About 20 representatives of the shippers, merchants and cotton exchanges were present at the conference.

Called by Senator Smith to seek an agreement within the industry on the proposition of Southern deliveries, a marked difference of opinion, as to whether such practices should be continued in the best interest of the growers, and small merchants, developed. The fight against the system was led by a group of Norfolk, Va., merchants, who were supported in their contentions by Louis Brooks, member of the New York Cotton Exchange, who favored also a limitation being placed on the holdings of individuals.

SUPERINTENDENTS AND OVERSEERS

We wish to obtain a complete list of the superintendents and overseers of every cotton mill in the South. Please fill in the enclosed blank and send it to Textile Bulletin, Charlotte, N. C.

________________, 193___

Name of Mill________________

Town________________

________Spinning Spindles________Looms

________________Superintendent

________________Carder

________________Spinner

________________Weaver

________________Cloth Room

________________Dyer

________________Master Mechanic

Recent Changes________________

____

PRINTING

All Kinds of

MILL *and* OFFICE

FORMS

DAVID CLARK, *Owner*

WASHBURN

PRINTING

Company

P. O. Box 974, 18 W. 4th St., Charlotte, N C.

Geo. W. Robertson Completes Fifty Years At Danville

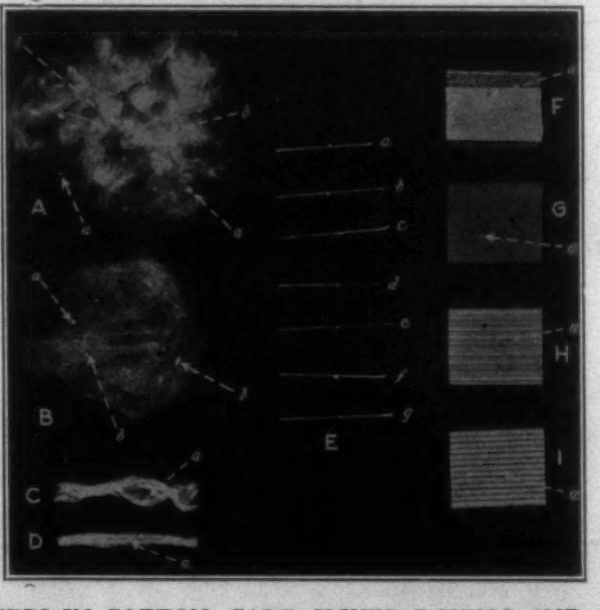
(Continued from Page 8)

D. E. Blake, of Biddeford, Me.; H. A. Detwiler, of Norristown, Pa.; Clifton E. Watson, of Millbury, Mass.; Maurice Hambleton, of Nashua, N. H.; Fred W. Howe, of Worcester, Mass.; P. L. McMahon, of Charlotte, N. C.; Ira L. Griffin, of Charlotte, N. C.; Edward M. Johnson, of Providence, R. I.; Frank Johnson, of Charlotte, N. C.; Robert W. Glenn, of Greensboro; W. M. Hunt, of Greensboro; John L. Dabbs, of Charlotte; J. D. Sandridge, of Greensboro; Alexander West, Providence, R. I.; Phillip Wentworth, Providence; Paul Haddock, Charlotte; J. Hannon Schoolfield, New York City; Walter Pratt, Charlotte; Erwin N. Darrin, Spartanburg, S. C.; H. Lord, Boston, Mass.; Phillip Brown, Dover, N. H.; James Cook, Providence, R. I.; C. H. Anthony, Hartford, Conn.; Harry Dick, Philadelphia; S. B. Alexander, Charlotte; J. E. Butterworth, Philadelphia; George P. Ray, New York City; Dennis Reardon, New York City, and John M. Hughlett, Atlanta, Ga.

British Exports Lower

Cotton goods exports by Great Britain for December showed a sharp decline as compared with the total for the corresponding month of last year, according to the official statistics, released by the Board of Trade. Exports of cotton yarns also showed a falling off.

Cotton goods exported during December totalled 155,524,000 square yards, as compared with 194,823,000 square yards for the preceding December. Cotton yarn exports last month aggregated 1,060,000 pounds, as against 11,743,000 pounds a year ago.



NEPS IN COTTON, CARD SLIVER ROVING AND YARNS

A, Ginned lint showing neps *a*, and fragments of seed coat *b*. B, Portion of card sliver separated to show neps *a* and seed coat fragments *b*. C, Portion of fine frame roving containing a nep *a*. D, Portion of fine frame roving containing a fragment of seed coat *a*. E, Pieces of yarn with neps *e*, *f*, and *g*, and seed coat fragments *a*, *b*, *c*, and *d*. F, Cloth with a conspicuous fragment of seed coat *a*. G, Cloth with neps that did not dye (light specks, *a*.) H and I, Cloth with conspicuous dyed neps *a*. All figures two-thirds natural size.

Your Market

for Textile Equipment and Supplies is the

SOUTH

The Census Bureau of the U. S. Department of Commerce recently released the following statistics showing spindle activity and cotton consumption in the United States for October, 1933:

Active Spindles in the SOUTH	**17,614,074**
Active Spindles in All Other States	**8,261,068**

Bales of Cotton Consumed by SOUTHERN mills	**405,157**
Bales of Cotton Consumed by All Other Mills	**98,716**

In 1934

these busy SOUTHERN mills, steadily consuming four times as much cotton as all other mills in the country, are going to be buying a tremendous volume of materials and supplies. There's a whale of a market here, too, for new, improved machinery to replace the old and obsolete.

Keep Your Products Constantly Before the Officials Who Do the Buying for Southern Mills Through the Journal They READ Every Week

MEMBER
A. B. C.

TEXTILE BULLETIN

MEMBER
A. B. P., Inc.

LOWEST COST COVERAGE OF THE TEXTILE SOUTH

CLASSIFIED ADS.

WANTED—Five or six A No. 1 Draper E Model loom fixers for five or six months work. Apply at once to G. F. R., care Textile Bulletin.

WANTED—Position as overseer carding and spinning, or preparatory department. 17 years' experience on cotton warp filling and hosiery yarn. Strictly sober and good manager of help. Can furnish best of references. W. W. S., care Textile Bulletin.

WANTED—Machine twister experienced on hand silk. Call Katterman & Mitchell, Stanley, N. C.

WANTED—A designer and warp room man. State age and experience. Apply "Warp," care Textile Bulletin.

WANTED—Position as roller coverer; sight years' experience. Good references. J. F. T., care Textile Bulletin.

WANTED—Salesman for textile machinery, who must be thoroughly experienced in the manufacture of cotton. Answer G. S. C., care Textile Bulletin.

COTTON MILL
For Sale at 10% of Cost
8500 Spindles
260 Looms
360 H.P. New Diesel Engine
Brick Buildings
Good Tenant Houses
Low Taxes—Good Location
A Bargain

For further information communicate G. P. W., care Southern Textile Bulletin.

Blanket Mills Get U. S. Order

Washington.—The Federal surplus relief corporation purchased 1,052,000 cotton blankets from 13 companies operating cotton mills in New England and the South.

The blankets are to be distributed to needy persons on the relief rolls throughout the country.

The prices range, it was stated at the corporation offices, from 99 cents to $1.29 per blanket.

"The largest contract went to the Nashua Manufacturing Company of Boston, which received an order for 244,000 blankets, and the second largest to the Carolina Cotton and Woolen Mills Company of Spray, N. C., which will supply 183,000. The Chatham Manufacturing Company of Winston-Salem, N. C., will provide 180,000.

Other contracts awarded were:

Southeastern Cottons, Inc., New York, 24,000 blankets; Cannon Mills, Inc., New York, 39,000; Leaksville Woolen Mills, Inc., Charlotte, N. C., 65,000; Whittington Manufacturing Co., Boston, 36,500; W. S. Libby & Co., Inc., New York, 26,000; Clarence Whitman & Sons, Inc., New York, 75,000; Pepperell Manufacturing o., New York, 122,500; Cone Export & Commission Co., New York, 19,500; and M. Silverman & Son, Inc., Philadelphia, 4,000.

Seek No Further Silk Textile Curtailment

Further curtailment in production will not be sought at present by the silk textile industry, it was decided by the Code Authority. No application in this connection to Administrator Hugh S. Johnson is under contemplation.

The Code Authority has ruled that wage differentials, to be maintained under the President's executive order, should be based on the standards affecting winding, quilling, warping, weaving and loom fixing, and not on some minor operation.

It was also noted that "refusal to comply with requests for statistical information sought by the Silk Code Authority is a direct violation of the code."

Industrial Rayon Nets $1,806,791 for 1933

Cleveland.—Industrial Rayon Corporation's earnings for the year ended December 31, 1933, totalled $1,806,791.94 after deductions for Federal income tax, depreciation and all other charges, D. S. Mallory, secretary and treasurer of the firm, announced.

This compares with net profit of $237,251 for the preceding year.

New **LOW FARES**
between all stations on the Southern Railway System

ONE WAY FARES

1½¢

ONE and ONE-HALF CENTS PER MILE for one way tickets good in COACHES

•

3¢

THREE CENTS PER MILE for one way tickets good in sleeping and parlor cars
--- NO SURCHARGE ---

•

ROUND TRIP FARES

2¢

*TWO CENTS PER MILE for each mile traveled for Round Trip Tickets, with 15-day limit
--- NO SURCHARGE ---

•

2½¢

*TWO and ONE-HALF CENTS PER MILE for each mile traveled for Round Trip Tickets, with 30-day limit.
--- NO SURCHARGE ---

* Good in Sleeping and Parlor Cars.

TRAVEL BY TRAIN!

Comfortable, Economical, Safe

Consult Passenger Traffic Representatives and Ticket Agents for full information.

FRANK L. JENKINS, Passenger Traffic Mgr., Washington, D. C.

SOUTHERN RAILWAY SYSTEM

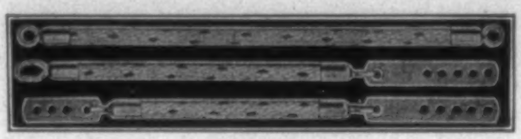
The Code dictates hours-per-spindle but —

RINGS dictate your production-per-spindle!

Your spindles will run as fast as your rings will let them. The traveler-and-ring combination is the "bottleneck" that restricts spinning and twisting production. To achieve maximum production, give every spindle a perfect ring. Diamond Finish Rings with their exceedingly high polish, break in within a few days, generally without lightening travelers. Within a week after installing the far higher speed is giving you substantially increased production per spindle — PLUS better work.

Whitinsville (Mass.) SPINNING RING CO.

Loom Cords a Specialty



We Also Manufacture

The Improved Dobby Bars and Pegs

Rice Dobby Chain Company

Millbury :-: Mass.

CLINTON STARCHES

FOR ALL TEXTILE PURPOSES

Manufactured by

Clinton Company

CLINTON, IOWA

QUALITY SERVICE

Books That Will Help You With Your Problems

"Clark's Weave Room Calculations"

By W. A. Graham Clark

Textile Expert of U. S. Tariff Commission

Second edition. Completely revised and enlarged. A practical treatise of cotton yarn and cloth calculations for the weave room. Price, $3.00.

"Practical Loom Fixing" (Third Edition)

By Thomas Nelson

Completely revised and enlarged to include chapters on Rayon Weaving and Rayon Looms. Price, $1.25.

"Carding and Spinning"

By Geo. F. Ivey

A practical book on Carding and Spinning. Price, $1.00.

"Cotton Mill Processes and Calculations"

By D. A. Tompkins

Third edition. Completely revised. An elementary text book for the use of textile schools and home study. Illustrated throughout. Price, $2.00.

"Remedies for Dyehouse Troubles"

By Wm. C. Dodson, B.E.

A book dealing with just that phase of dyeing which constitutes the day's work of the average mill dyer. Price, $1.50.

"Cotton Spinner's Companion"

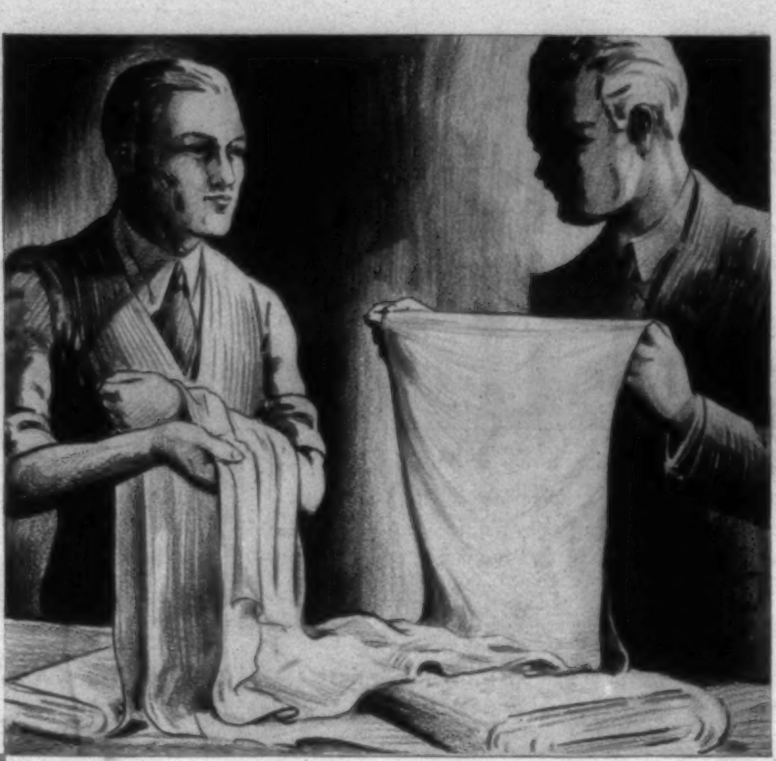
By I. C. Noble

A handy and complete reference book. Vest size. Price, 50c.

Published By

Clark Publishing Company

CHARLOTTE, N. C.



for **BRIGHTER SHADES** *in many dyeing operations*

USE

GRASSELLI FORMIC ACID

85% and 90%
Commercial

GRASSELLI Formic Acid is always uniform in quality—always crystal clear—never darkening when exposed to light. Being both an acid and an aldehyde, it produces results not obtainable with other acids.

It will not tender the most delicate fabrics, yet has the efficient strength to completely exhaust the dyebath, thus saving much in expensive dyestuffs.

It produces colors that are brighter and more brilliant in shade, without streaks or clouds, and perfectly level, even in cross dyeing.

GRASSELLI GRADE is your assurance of safety in formic acid. Quick service from any Grasselli branch.

GRASSELLI

THE GRASSELLI CHEMICAL CO.
CLEVELAND INCORPORATED **OHIO**
New York and Export Office: 350 Fifth Avenue

ALBANY
BIRMINGHAM
BOSTON
CHARLOTTE
CHICAGO
CINCINNATI
DETROIT
MILWAUKEE
NEW HAVEN
NEW ORLEANS
PHILADELPHIA
PITTSBURGH
ST. LOUIS
ST. PAUL

SAN FRANCISCO, 584 Mission Street
LOS ANGELES, 2260 East 15th Street

Represented in Canada by CANADIAN INDUSTRIES, LTD.
Acids and General Chemicals Division
Montreal and Toronto

Other Grasselli Chemicals for Textile Manufacturers

Acetic Acid
Acetate of Soda
Acetate of Lead
Alums, U. S. P.
Aqua Ammonia
Barium Chloride
Bi-Chromate of Soda
Bi-Sulphate of Soda
Bi-Sulphite of Soda
Carbonate of Soda
Caustic Soda
Chloride of Lime
Chloride of Zinc
Epsom Salts
Glauber's Salt
Lactic Acid
Muriatic Acid
Nitric Acid
Oxalic Acid
Phosphate of Soda
Silicate of Soda
Sulphate of Alumina
Sulphate of Soda, Anhydrous
Sulphite of Soda
Sulphide of Soda
Sulphuric Acid
Tri-Sodium Phosphate

GRASSELLI GRADE
A Standard Held High for 95 Years